THE LANCET.

VOL. II.] LONDON, SATURDAY, MARCH 27, 1841. [1840-41.

LECTURES
ON
AMPUTATION,
AND ON THE
Nature, Progress, and Terminations of the Injuries for which it is required.

(Delivered at Sydenham Coll. Med. School.)

BY RUTHERFORD ALCOCK, K.C.T., &c.

LECTURE VIII.

Comparison of the diseased actions supervening on complicated injuries of the extremities during treatment, and rendering AMPUTATION ***expedient or imperative, with those defined in previous Lectures as causing*** DEATH.

In the last lecture the nature of the diseased actions occurring during treatment in the most severe and complicated forms of injury, and rendering amputation of the limb necessary, were carefully analysed and classed, according to certain general and prevailing characters.

If we compare the character and proportionate frequency of these supervening actions rendering *amputation* necessary, with those already analysed and classed as causing *death*, the conclusions to which I now proceed to call your attention will be borne out by the facts.

In Lecture IV. of this series, I laid before you a detailed analysis of the number of deaths and the causes,—that the comparison may be clear, I will briefly recapitulate the final results.

FATAL ACTIONS.

In 192 cases treated, supervening actions caused death during treatment in 38, or one-fifth of the whole number treated.

In these 38 fatal cases, *fever predominated in* 21.

In 18 of defined character—

10 hectic.
5 remittent.
3 continued, intermittent, irritative, 1 each.
3 character undefined.

21

Average term of fatal development, 44½ days.

In these 21, 5 presented disease of viscera; 4 were suspected by the symptoms, but the fact not ascertained by examination of the cavities; and 2 had gangrenous limbs.

The *class of irregular or accidental causes*, corresponding with the third class of supervening actions causing amputation, amount to 14 (the causes of death in the remaining 3 not having been ascertained).

Of these, shock, tetanus, and other complicating wounds (causing exhaustion), are in equal numbers, 3 each; a fraction more than one-fifth. Hæmorrhage and gangrene, 2 each; or one-seventh. Angina pectoris, 1. Average term of development, 26½ days.

Diseased Actions causing Amputation.

The number of these supervening actions during treatment are 52 (see Tables III. and IV.); but in relation to the proportionate number treated, I must refer to Tables I. and II., for 13 of the 52 form a series from a Portuguese campaign: the series of fractures in the same period, and therefore appertaining, are not included in the number of cases treated and recorded in the same tables.

Referring, therefore, to Tables I. and II., the total number of cases not amputated in the first instance, but submitted to treatment, together with the number of those which subsequently required amputation, are thus stated—(see following page).

It appears, therefore, that in nearly 200 cases submitted to treatment, two-fifths of the whole are lost, either in life or limb, by these supervening actions: and in this large series, very nearly the same proportion of deaths take place without operation, as there are cases which require or admit of amputation.

Of the 39 amputations resulting from these supervening diseased actions, 17, or not far from one-half, died subsequently, either by the continued development of the same actions, which the operation may not have succeeded in cutting short; or by actions supervening upon the amputation, which may thus act as a new injury upon the system. The total loss of *life* in the 192

Amputations.

	Total Number of Cases.	Supervening Actions caused Amputation in	Proportion to Cases treated.
Fractures not involving joints	131	23	5.6
Ditto implicating joints	61	16	3.8
Two classes combined	192	39	4.9

In the same series it will be found that the proportion of deaths in the cases where amputation was not performed, is as follows:—

Deaths.

	Total Number of Cases.	Deaths.	Proportion to Cases treated.
Fractures not involving joints	131	18	7.2
Ditto into joints	61	20	3.
Two classes combined	192	38	5.0

cases is thus, within a very small fraction, 1 in 3.5, or between a third and a fourth.

For the proportionate frequency of different *classes* or *kinds* of supervening actions, and their average term of development, we may return to the Tables III. and IV. of larger numbers, and resume the analysis of 52 instead of 39 amputations. These present several complete series, occurring in certain defined periods; they show, therefore, as faithfully the proportions of one kind of diseased action to the other as the smaller number lately quoted.

The average period at which amputation was indicated by the development of morbid processes in the system or the limb, according to the prevailing type which has been adopted for the classification of kinds, is not devoid of interest, as showing the greater or less degree of gravity and malignancy in different classes of morbid actions, compared with the average *fatal* development of the same diseases. Where febrile action predominated, the average period for the performance of amputation was 29 days: for more irregular actions, 29¼ days. Excluding 2—one at 4 years, the other at 7 months—where the period of performance was a matter of choice to the patient.

The average period of fatal development of febrile actions supervening upon these injuries being 44½ days; and for more irregular actions, 26¼ days.

We see, therefore, that the supervening febrile actions which, on an average period of 44½ days, end fatally, if amputation be not performed, demand amputation at an average of 29 days. While the fatal development of the class of irregular supervening actions, at an average period preceding that which generally leads to amputation, obviously indicates the greater severity of the former; and that, in many instances, the suddenness of their appearance, or their fatal character, render amputation, as a remedial means, impossible, or unjustifiable. In other words, the supervening "irregular actions" are shown to be of a more fatal and less manageable character as causes of death, than when they appear as causes of amputation, and that it is only in the milder forms that this alternative is offered.

In reference to these supervening actions, local and general, which I have classed as "irregular, having peculiar or specific characters," and leading to amputation, trismus gave rise to that measure, twice at 8 days and once at 10 days.

Death was caused in 2 at 7, and in 1 at 48 days.

Secondary hæmorrhage in 7 led to amputation at the following periods:—3 at 13 days; 1 at 11; at 34, 50, 77 days each: average period, 50 days.

Death was caused in 2; at 84 and at 34 days: average 59.

The average period of occurrence in the 9 is 37¾ days.

This is a result for which, I believe, many in the profession are not prepared. The usual period for the occurrence of this dangerous complication of gunshot wounds, has hitherto been fixed by military writers at 10 or 12 days. Within this period only 1 took place, and even within 30 days only 4, or less than one-half of the whole.

I can fully depend upon the accuracy of these data; and I may confess that, until I began to labour at these statistical results, I was scarcely myself prepared to find an average period so remote from the infliction of the wound. In reference to this complication of injuries of the extremities, I may observe, however, that there are two very distinct causes of secondary hæmorrhage. The first arises from the separation of sloughs at the commencement of the suppurative process, and the disgorgement of all the tissues, allowing a free passage for the blood through any ruptured point, which may have been the result of the passage of a ball.

The second, from the pressure of a spicula, or end of a shaft of bone, first producing slough, and then rupture; or inflammation, and ultimately ulceration; or, finally, by a spicula protruding through the coats of an artery: occasionally, but more rarely, from the extension of an ulcerative or gangrenous

action, from the adjoining tissues to the coats of an artery.

The first causes generally produce hæmorrhage before the 15th day, rarely after the 20th; the second may occur at *any* period during treatment, and generally after weeks or months.

In the series quoted of fractures of the extremities, it appears as a cause of death in the proportion of 1 in 96; as a cause of amputation, 1 in 27.4.

Sloughing or gangrene is common, both as a cause of death and of amputation. The other divisions do not offer results of such importance as to require remark or further explanation.

By comparing the resumé already given of "*causes producing* DEATH *without amputation*," and "*supervening actions necessitating* AMPUTATION," it will be evident that the general features or characters chiefly differ, in the large predominance of fever, in distinct types in the former. Although some analogy exists in the proportion of the different classes, examination will also show that some causes produce death, which do not appear as causes of amputation; such, for instance, as shock; complicating wounds in other parts; secondary abscesses, and chest affections; and in any future records it seems probable that tetanus would disappear from the list of supervening actions proving causes of amputation. I have had sufficient proof to carry conviction to my own mind, that it never arrests the fatal action when once developed; but either by the exhaustion of the second shock more rapidly destroys the patient, or should he so far recover as to allow reaction, that the nervous system is still more violently affected.

Some actions there are which necessitate or lead to amputation, but not to death. Such are contracted and useless limbs, or limbs so subject to pain from the lodgment of balls or other sources of irritation, as to induce the patient to seek relief in operation.

On the Differences and Resemblances between the Causes of Amputation in Fractures simply and in Fractures involving Joints.

I am disposed, for a moment, to draw attention to this analysis rather as furnishing data on which to build hereafter in any subsequent inquiries directed to this subject, or as facts which may prove useful when added to, or compared with others than from any very striking feature brought out in the present series.

CAUSES OF AMPUTATION.

In Gunshot Fractures not involving Joints.

13 General and local bad actions without specific characters, or the case decided to be hopeless, and delay appearing dangerous.
7 Secondary hæmorrhage.
3 Sloughing and gangrenous action.
3 Tetanus.
*1 Suppurative disease disorganising limb.
1 Disease of periosteum.
*1 Mortification of limb below.
1 Deficient and sluggish character of actions at seat of injury.
1 Contracted hand—ball-lodged.

—
31

In Gunshot Fractures, extending into the Articulations.

16 Local and general bad actions without specific characters.
2 Gangrene.
1 Pain and permanent inconvenience in locomotion from lodgment of ball.
1 Periosteal disease.
*1 Local unhealthy action chiefly.

—
21

The most remarkable circumstance here is the fact, that all the cases of secondary hæmorrhage occur exclusively in fractures not implicating joints; although the close proximity of the axillary, brachial, popliteal, and other arteries, would seem to place them in not less jeopardy in fractures of the articulations. *Tetanus* also is confined to the one class—fractures.

The causes of amputation in the intermediate period, from the 3rd to 19th day, both inclusive, and the secondary performed at any time subsequent, present some differences not unworthy of note.

CAUSES OF AMPUTATION IN INTERMEDIATE PERIODS.

Supervening Actions causing Intermediary Amputation.

Number of amputations, 27.
17 Rendered necessary by unfavourable actions, general and local, but not of specific character, or on evidence being obtained that the cases were hopeless from the nature of the injury.
3 Trismus.
2 Sloughing and gangrenous action of part, or whole, of the whole limb.
1 Bad and sluggish local action.
4 Secondary hæmorrhage.

—
27

Causing Secondary Amputation.

Number of amputations, 25.
12 Unfavourable actions not of specific characters, &c.
2 Periosteal disease.
3 Sloughing or gangrene.

* These three included in local and general bad actions in the analysis of Lecture VII.

3 Secondary hæmorrhage.
2 Bad local actions.
1 Contracted hand;
1 Pain and inconvenience in knee on locomotion;—in both from lodgment of ball.
1 Mortification of foot.

25

Tetanus was never made a cause of secondary, although in three instances of intermediary amputation; secondary hæmorrhage may be considered as equally divided, for in one of the four secondary amputations the hæmorrhage came on before the 20th day, although amputation was deferred for some time. Gangrene preponderates among secondary amputations. Upon the whole, more causes of specific character, which may be classed among those "irregular or accidental," are presented as causes of secondary than of intermediary amputation. In the latter they amount to one-third; in the former to more than one-half.

I have thus shown, by careful analysis, what are the supervening actions causing amputation: 1st, in their largest classification; 2ndly, in reference to two great classes of injury,—"fractures into joints," and "fractures *not* involving the articulations;" 3rdly, in reference to periods at which operation was required. It still remains to be shown how these are modified by the *nature of the case*, as regards its being of a favourable nature for treatment (having reference, therefore, both to *degree* and *kind*), or of a doubtful or unfavourable type.

In 13 *Favourable Cases for Treatment, which required Amputation.*

2 Local and general actions not of specific character.
4 For secondary hæmorrhage.
2 For periosteal disease.
2 Pain and contraction from lodgment of balls.
1 Unfavourable local action.
1 Sloughing and gangrenous action.
1 Trismus.

13

In 16 *Doubtful Cases for Treatment, ultimately Amputated.*

7 Local and general actions, not of specific character, or the hopeless nature of the case demonstrated.
2 were for secondary hæmorrhage.
2 Excessive local disease, sloughing.
1 Gangrene.
1 Bad and sluggish action of limb.
2 Tetanus.
1 Mortification of foot.

16

In 23 *Unfavourable Cases for Treatment, ultimately Amputated.*

20 were performed for local and general actions of no very specific character, or from the hopeless nature of the case being demonstrated during the progress of treatment.
2 For sloughing.
1 For secondary hæmorrhage.

23 Unfavourable cases.
16 Doubtful.
13 Favourable.

52 Total amputated.

It will be observed, that in favourable cases certain well-defined and specific causes, partaking of the character of irregular or accidental results, lead in the great majority to amputation. In doubtful cases, again, although a large proportion of the amputations have a similar cause, yet not far from one-half is from general and local deterioration, having no very distinct character, but evidently pointing to the hopelessness of further attempts to save the limb. In the much larger number, however, of unfavourable cases, nearly seven-eighths are amputated from the hopelessness of conferring benefit by treatment, and not from any specific or peculiar action supervening. Hence, it seems a legitimate inference, that when favourable cases are selected for treatment, only such of them will require amputation as may become the subject of some of these accidental or irregular complications; but in *doubtful* cases nearly one-half may be expected to require operation by the mere result and natural progress of inflammatory and suppurative processes. When *unfavourable* cases, by any adverse circumstances, or error of judgment, are submitted to treatment, seven-eighths of the whole, in which an opportunity occurs for amputation, will require it from the mere hopeless nature of the injury, and its consequent and natural progress from bad to worse.

The influence upon the diseased actions supervening on complicated injuries, of the external collateral circumstances under which they are treated, and of the site of injury, are deserving some notice; and, first, let us consider the effects of "external circumstances."

The Tables, from IX. to XV. inclusive (see pp. 604, 714—16), have been formed for the express purpose of showing the influence of these circumstances upon the cases, rendering amputation necessary in very different proportions. The same number and series already analysed, with other views, are here classified.

For the sake of brevity, I shall include in one class the "unfavourable" and "partially unfavourable," and compare their results with those treated under favourable circumstances

The supervening actions rendering amputation necessary in 33 cases treated under favourable, and 19 under more or less unfavourable circumstances, admit of the following classification :—

Under Favourable Circumstances.

16 Bad actions, local and general, of no very specific character, either depriving surgeon of hope of cure, or rendering amputation a safer measure.
2 In anticipation of fatal actions, cases unfavourable for treatment.
3 Mortification—gangrenous or sloughing actions.
5 Secondary hæmorrhage.
2 Tetanus.
2 Pain and inconvenience from lodgment of balls.
1 Diseased state of limb generally.
2 Periosteal disease.

33

Under more or less Unfavourable Circumstances.

10 Bad actions, local and general, &c.
1 In anticipation.
2 Mortification, sloughing, &c.
2 Secondary hæmorrhage.
1 Tetanus.
2 Diseased state of limb generally.
1 Low and deficient action.

19

The elements are the same both under favourable and unfavourable circumstances, some slight differences existing only in the proportion of one kind of diseased action to another.

About one-half of the amputations in each are caused by those actions, local and general, which obviously indicate amputation, as the best and often sole resource ; the remaining half are caused by peculiar, irregular, or accidental diseased actions. Secondary hæmorrhage seems most frequent under favourable circumstances ; and this apparent and unexpected result is rendered more difficult to account for by reference to the nature of the injuries, 21 of the 33 are fractures into the articulations. We have already seen that in the whole of these injuries there is not one case of secondary hæmorrhage. Mortification, sloughing, low action, or excessive local disease, preponderate in cases treated under unfavourable circumstances, and indicate the kind of influence chiefly exercised as regards any change in the *nature* of the supervening actions. The real and most important effect of favourable or unfavourable circumstances during treatment is not to be sought for in the changed nature of the supervening actions, but in the comparative frequency with which amputation is required under each, and the mortality in cases treated, but not amputated.

In a previous lecture I pointed out the proportionate number of amputations under different circumstances, and in connection with the deaths of the same series in cases not operated upon.

Thus to recapitulate the chief results (see vol. i., p. 778) :—

	Amputations.	Deaths in Cases not operated upon.
Under favourable circumstances for treatment, the proportion was	1 in 3.4	11.8
Under partially unfavourable	1 in 9.5	2.1
Under unfavourable ditto	1 in 8.1	3.7

As the proportion of amputations diminish, it will be seen the mortality in patients not amputated is increased, the combined disastrous results being under the three conditions, as 1 to 2.7, 1.9, 2.5 ; that is, they are nearly equalised as regards the two extremes of *favourable* and *unfavourable* circumstances, with this essential distinction, that under favourable circumstances only one-twelfth of the number forming the combined result are *deaths* in cases treated, the rest being made up of *amputations ;* whereas, under unfavourable circumstances, this is nearly reversed, 1 in 3.7 *dying*, and only 1 in 8 being *amputated*.

These, therefore, are the most prominent effects of the influence of external circumstances upon treatment and amputation ; and thus is explained the otherwise unintelligible increase of amputations under favourable circumstances. Under different circumstances, amputations and deaths change their relative proportions, the one supplying the other's place. The combined results of death and amputation only varying by the fractional difference between 2.763 and 2.230 (taking the two more or less unfavourable together), the real and important difference lying in the proportion of amputations to deaths.

The following conclusions, therefore, it appears to me, is placed beyond doubt, viz. :—

The favourable or unfavourable nature of external circumstances under which cases are treated, shows its influence by *diminishing* the number of amputations in proportion as they become unfavourable, and in a much greater proportionate number *increasing* the number of deaths in those treated without operation ; for while it diminishes the number of amputations more than one-half, from 1 in 8.7 to 1 in 3.4, it nearly quadruples the deaths, raising them from 1 in 11.8 to 1 in 3.

Influence of* SITE *upon those Supervening Actions which render Amputation necessary during Treatment.

5 ***Lower Extremity above the Knee.***
- 3 State of limbs chiefly, but both local and general bad actions.
- 2 Secondary hæmorrhage.

12 ***Involving the Knee-joint.***
- 1 Local bad action leaving no hope.
- 1 Ditto gangrene of foot.
- 8 Local and general actions inimical to cure without peculiar or specific characters.
- 1 Pain and inconvenience from lodgment of ball (at end of four years).
- 1 In anticipation of local and general bad action—limb incurably injured.

10 ***Tibia and Fibula above Ankle.***
- 1 Secondary hæmorrhage, with local and general bad action.
- 1 Local and general bad action.
- 3 Chiefly in anticipation of the full development of bad actions commenced.
- 1 Bad and deficient action.
- 1 Mortification of foot and ankle.
- 2 Tetanus.
- 1 To arrest destructive action on system.

4 ***Involving Ankle.***
- 2 Chiefly local, unfavourable action.
- 2 Anticipating full development of local and general bad actions commenced.

1 ***Upper Extremity involving Shoulder.***

Unfavourable action, chiefly local.

6 ***Humerus above the Elbow.***
- 4 Local and general bad actions.
- 1 Secondary hæmorrhage.
- 1 Extensive periosteal disease.

2 ***Involving Elbow.***
- 1 Periosteal disease.
- 1 General and local bad actions.

9 ***Forearm.***
- 2 Sloughing and gangrenous actions.
- 1 Contracted hand.
- 1 Bad action, local and general.
- 3 Secondary hæmorrhage.
- 1 To anticipate full development of bad actions.
- 1 Tetanus.

2 ***Wrist.***
- 1 Local and general bad actions.
- 1 Sloughing and disorganisation.

1 ***Foot.***

Bad local and general action.

This view of the supervening actions, causing amputation in the upper and lower extremities at different points, is not without interest.

If we compare the actions in the lower extremity from the hip to the knee inclusive, with the upper from the shoulder to the elbow, the relative number being seventeen and nine. In the lower there is gangrene of foot—no such action is produced by the injuries in the upper; periosteal disease appears twice as a cause of amputation in the upper extremity; not once in the lower; trismus appears in neither; secondary hæmorrhage equally in both. Local and general bad actions without peculiar or specific characters, appear also equally in both.

Below the knee, including ankle and foot, there are 14; below the elbow, including wrist and hand, 12.

More than one-third of the amputations of the lower extremity are performed to anticipate the full development of actions, respecting the bad consequences of which no doubt can have been entertained. In one instance only was this done in the forearm and hand, indicating how much less risk attends the attempt to save in the latter than the former. Secondary hæmorrhage preponderates in the forearm, hand, and wrist, as 3 to 1; sloughing and gangrenous action appears in both, but mortification of the extremity of the member in the leg alone.

I shall conclude by recalling to your memory certain facts brought out in the last lecture, showing merely the *general* results (the details of which are now before you) of two sets of physical influences in combination, in developing and modifying diseased actions supervening during treatment on *complicated fractures*, and rendering amputation of the limb necessary; viz., 1st, the favourable or unfavourable nature of the injury; 2ndly, the favourable or unfavourable nature of the external and collateral circumstances under which treatment was conducted.

The proportion of amputations under combined favourable or unfavourable conditions may be thus shortly recapitulated:—

	Proportion of Amp. to No. of Cases treated.
In favourable cases treated under favourable circumstances.	1 in 4.
Ditto, unfavourable ditto	1 in 1.7
Doubtful cases under favourable circumstances	1 in 1.4
Ditto, unfavourable ditto	1 in 2.
Unfavourable cases under favourable circumstances	1 in 2.8
Ditto, unfavourable ditto.....	1 in 6.2

On the conclusions to be drawn from these results, I have already sufficiently dwelt in a preceding lecture.

I have now brought before you the various series of facts which serve to define the nature and extent of influence of numerous physical and appreciable conditions, such as the nature and degree of the injury, the external conditions under which treated, &c., in reference to the two principal disastrous results, *Death* and *Amputations*.

In my next lecture, I shall pass on to the consideration of other and less appreciable, although certainly not less important, influences: those hitherto dwelt upon have been *physical*, there yet remains to be investigated the class of *Dynamic or Vital Influences*.

ON THE

DIAGNOSIS, PATHOLOGY, AND TREATMENT OF AMAUROSIS.

By Edward Hocken, M.D.

In a paper published in The Lancet for August 15, 1840,* I narrated many particulars of a form of amaurosis, which, as occurring in individuals of an hysterical constitution, and marked by symptoms unseen in other cases, deserved, in my estimation, the denomination of "hysterical amaurosis." I can add a few more remarks on the same subject, calculated, I deem, still further to illustrate its diagnosis and nature.

In the first place, then, it will be necessary to define my views of the nature of hysteria itself, inasmuch as a celebrated individual (Mr. Middlemore) considers my description, in females, as synonymous with uterine irritation. To use his own words, he says, "Disorders of the stomach and uterus, &c., constitute a fertile source of amaurotic affections, and which are, for the most part, manageable by suitable treatment. The important question is, Are there any given set of outward and visible signs, by which any given form of uterine amaurosis can be distinguished from any given form of gastric amaurosis? and if so, What are they?" To answer these questions, I will now proceed methodically. We may define hysteria to consist of such a condition of the general nervous system, original or acquired, as renders it capable of simulating most local diseases, of complicating them in their progress, and modifying them in their usual phenomena; or the general nervous system itself may be the theatre of its operations, being then attended with general convulsions, and complicated with symptoms derived from the impeded functions of particular organs: the condition of the nervous system in its two extremes varying from mere increased excitability and mobility, to complete coma or catalepsy. Affections of an hysterical character are usually marked by great and sudden changes in the display of the mind's affections and sensibilities, by tears and laughter, by anger and joy, despair and hope; by a copious flow of limpid urine, nearly colourless, borborygmi, and flatulence, the sense of a globular body rising from the abdomen to the throat, with feelings of suffocation (globus), and a circumscribed pain in the temple, severe in character, denominated clavus. That the constitutional and local phenomena most frequently occur in females shortly after puberty, being rarer in the adult, rarely, but still occasionally, seen in the male.

Such, I believe, to be a sufficiently wide definition—a definition which alludes especially to four particulars: 1st, that hysteria occurs only in a particular condition of constitution; 2nd, that this constitutional affection varies from mere "nervousness" to the most exaggerated effects of a suffering nervous system; 3rd, that it is not necessarily connected with any local disturbance, although usually such affections bear the relation of exciting causes; 4th, that the uterus obviously has no especial connection, since it may occur in the male; and females mostly suffer, because naturally more delicate and excitable. We find Sydenham, in speaking of hysteria, says—"Quinimmo non panci ex iis viris qui vitam degentes solitariam, chartis solent impallescere eodem morbo tentantur."

In answer to the already-proposed queries, I must state that the diagnosis would be founded on the preceding and accompanying derangements, the history of the patient's constitution, and the peculiarity of the symptoms themselves: these peculiarities I will briefly sketch, premising that either of them would, doubtless, be modified by an hysterical constitution, so as to present anomalous symptoms; and these being mixed up with and forming an integral part of the symptoms proper to the sympathetic variety, would give either of them, more or less, title to the name of hysterical. I will first mention the diagnostic marks between hysterical amaurosis and sympathetic uterine or abdominal amaurosis, and then those which would serve to separate the two latter.

1st. In the sympathetic amauroses, the uterine or abdominal irritation would precede the development of the amaurotic symptoms; the indications of such irritation being either acute and sudden, or chronic, and developed gradually. Whilst in hysterical amaurosis there is no necessary connection whatever, with either uterine or abdominal derangement; such may not exist at all, it may precede or follow, exaggerating the constitutional condition, however, when any such affection exists or increases.

2nd. The loss of sight in the sympathetic may be complete or partial, intermittent or permanent, not necessarily, or even usually, connected with, or attended by, intolerance of light, or the general or local manifestations of an hysterical diathesis. In the hysterical there is always the greatest intolerance of light, spasmodic closure of the lids, globus hystericus, and freedom from the ordinary signs of an amaurotic affection.

3rd. In the sympathetic forms one eye only is affected, in the majority of instances; and the textures bear, more or less, proof of vascular congestion, with determination of blood to the head: hence headach, heaviness, tendency to sleep, frequently deep, and accompanied by snoring; derangement of the functions of the brain denoted by inaptitude

* Vide "Amaurosis from Hysteria," vol. ii., p. 751.

for any exertion of body or mind; the countenance is flushed, sometimes livid, and the carotids pulsate morbidly. In the hysterical both eyes are always simultaneously deranged, and clavus is complained of as affecting the brow; whilst general cephalalgia and cerebral congestion are comparatively rare occurrences.

4th. Should the sympathetic varieties be chronic in their character, and attended by intolerance of light, our diagnosis may be assisted by observing that, under all circumstances, there is permanent defect of the retinal functions, and to a much greater extent than ever occurs in the pure forms of chronic hysterical amaurosis.

5th. That sympathetic amaurosis is not unfrequently complicated with strabismus of a permanent form—an affection which, I believe, never complicates the hysterical; but should such occur, as we may imagine, it would be of a spasmodic character, and recur only at intervals from excitement or fatigue.

In the comparative diagnosis of uterine and abdominal sympathetic amaurosis, there is rarely much difficulty. In both the primary cause precedes the development of amaurotic symptoms, although this may be more or less latent in its character, nevertheless always detectable by minute and careful inquiry. The amaurosis which results from derangement in the primæ viæ, or some associated organ, or set of organs, is frequently an acute affection; it occurs suddenly, succeeding some acute attack of dyspepsia, frequently from noxious or indigestible ingesta; the blindness may be complete, or nearly so; the pupils widely dilated, and motionless; there may be ocular spectra strabismus, and morbid nictitation. These symptoms may disappear as rapidly as they commenced, or pass off gradually, occasionally becoming chronic; but they are more frequently of short duration, or show themselves as a periodic affection. Uterine sympathetic amaurosis never, I believe, shows itself as an acute attack of a similar kind, it is always preceded by evident uterine symptoms; the blindness comes on gradually, shows itself in one eye, is attended with a contracted pupil and intolerance of light; and the patient usually complains of muscæ, deranged and morbid appetite, a tendency to chilliness and faintness, and frontal headach.

In the chronic forms of the non-uterine sympathetic amauroses, the pupils are dilated (for here one or both eyes are nearly equally affected simultaneously, on the average), their motions sluggish, the conjunctiva congested—accompanying a similar condition of the head generally; there is a desire for light, in which the sight is best: in uterine, the lids are spasmodically closed, the eye waters, and the tunics become of a bright scarlet colour, from exposure to intense light; thus entirely preventing any exercise of the retinal functions. The constitutional disturbance in both differs materially: in the abdominal, the skin becomes harsh and dry, the countenance shallow and shrunken, the conjunctiva of a dusky yellow colour, the tongue is loaded, the breath fœtid, the tongue and cheeks swollen and marked by the teeth, the appetite capricious, the mind desponding, the bowels irregular; frequently there is pain in one or both sides, and a sympathetic pain in the shoulder. In the uterine, the circulation is irritable, the temper fickle, and the heart readily excited by exercise, or the mind's emotions. The last diagnostic signs that I shall mention, are the difference in the primary originating causes; the disturbance of the functions of the primæ viæ, or, on the contrary, of the functions of the uterus. Should these occur conjointly, they would, probably, both assist in causing the amaurotic symptoms, and then the amaurosis would partake of the characters of each. The occurrence of cerebral congestion is common to both.

The following case is a good example of "amaurosis from uterine irritation." It was preceded by acute retinitis, which was cured by bleeding and mercury, leaving the retina in a condition predisposed to the sympathetic amaurosis. I may observe, that it approached most nearly to the symptoms of "amaurosis from hysteria,"* as detailed in the second volume of THE LANCET for 1839-40; but was sufficiently distinct from that affection, as may be gathered from the diagnostic marks I have already proposed.

CASE.—A fair, florid young woman, of sanguine temperament, possessing many of the appearances characterising the strumous constitution, twenty-one years of age, named Eliza Harwood, applied at the West of England Eye Infirmary, suffering from the following symptoms, brought on by a flash of lightning, whilst employed with needlework near the window:—Scarlet zonular vascularity, not reaching the corneal edge, but leaving a white ring intervening; the vessels very small, the zone well-formed, but not intense. There was great pain in the head and eye, inflammatory fever, intolerance of light and lachrymation to an excessive degree, slight inflammation of the conjunctiva, and complete freedom from any inflammatory appearance of the cornea or iris. This attack occurred in the year 1838; it was subdued by blood-letting, purging, and mercury, followed by counter-irritation. This same patient presented herself again, many months after the attack just narrated: she was now complaining of great defect of vision and excessive intolerance of light in the right eye (the eye previously inflamed). This condition, she stated, had already existed some time, being preceded, and still accompanied by considerable uterine derangement; the irides are light-coloured.

* Vide vol. ii., p. 751, 1839-40.

Previous History.—She stated that she was of healthy and active habits, but had been engaged during some time in the unhealthy employments of a factory. The previous history of the disease has been already mentioned.

Symptoms.—On examining the organ some difficulty was experienced from the intolerance of light, and the spasmodic closure of the lids, which were firmly contracted, and the eyeball rotated upwards and outwards. There was present slight conjunctival vascularity, much increased by a continuance of the exposure, all the other textures retaining their healthy brilliancy and normal appearance; there was no discoloration of the fundus of the eye, no zonular vascularity, the pupil being moderately contracted. She complained of occasional frontal headach, attended by the sensation of bright and dark muscæ.

The amaurosis was preceded and accompanied by uterine disturbance, on which it evidently depended; the catamenia were scanty, ill-conditioned, and irregular, secreted with pain, and attended by an aggravation of the local symptoms. The nervous system was excitable, but free from obvious symptoms of hysteria; the gastro-enteric functions were well performed, with the exception of the habitual presence of constipation.

This affection was not inflammatory at this stage, as deduced from the following list of symptoms; I think there can be no doubt of its uterine origin. First, then, the continuance of the disease for many months, unattended by change of structure or brilliancy in any of the textures; second, the absence of the inflammatory halo; third, the presence of intolerance of light, usually unattended by spectral illusions; fourth, and lastly, the marked presence of uterine irritation, preceding and attending the progress of the amaurosis, producing an increase in its symptoms when augmented at the menstrual period.

The treatment resorted to was local and general: the uterine disturbance was treated by appropriate remedial measures, the general nervous system calmed by anti-spasmodics and tonics, whilst soothing local means were employed to the eye itself, and efficient counter-irritation maintained in the neighbourhood. She has since suffered from frequent relapses.

But the amaurosis from hysteria may occur as an acute as well as a chronic affection; and here we almost invariably find that derangement in the primæ viæ of an acute or chronic character has proved the immediate exciting cause, aided or called into action by mental excitement, slight bodily injury, or fright.

In these acute attacks we almost invariably meet with anomalous head symptoms, which precede and accompany the development and course of the amaurotic symptoms; and in a case* which I saw, from its commencement to its termination, many other local phenomena of a distinctly nervous character appeared and disappeared suddenly during its progress. This is one of the peculiarities of such cases; namely, that the symptoms came on with an intensity and hurry never marked in common inflammations; they alternate in character, and disappear, or are alleviated most rapidly from improvement in the condition of the primæ viæ, or the complete correction of the exciting condition.

In the case to which I have just alluded, the amaurotic confusion and distress of vision came on in connection with severe head symptoms, and a deranged condition of the abdominal viscera; this, with the other painful and deceptive phenomena, readily yielded to remedies, by which the intestinal canal was mildly, but efficiently, cleared out, the nervous system calmed, and the local abdominal irritation relieved. (See "Essay on the Influence of Constitution.") A well-marked case of this kind is also narrated in the "Medical Gazette" (vol. ii., 1839-40, p. 838), by Mr. Dorrington, of Manchester. The affection commenced by a "queer" sensation about the head, attended with confused and deranged vision; this was on the 21st Feb., 1840. She was cured by treatment mainly directed to the condition of the primæ viæ; for on the 26th she was discharged, with but slight dimness of sight, which quickly disappeared. In the course of treatment the vision was suddenly restored, and then again suddenly deranged; she had previously suffered from hysteria, and was attacked, subsequent to this period, severely with that malady. We find cases somewhat similar arising from blows on the head, detailed by Messrs. Abernethy, Tyrrell, &c., and cured by tonics and anti-spasmodics.

Mr. Abernethy remarks, that in nervous patients cases of actual concussion, occasioning insensibility, are frequently followed by nervous pains in the head, &c. He proves these remarks by a case, in which a young lady, who went out of London for the improvement of her health, was stunned, by the upsetting of a gig in which she was taking exercise, from being unable to walk, from a "kind of rheumatic affection of her ankle" (neuralgic or hysterical?). She became blind on the fifth day. Mr. Abernethy recommended that the case should be treated as one of nervous blindness: under this treatment the patient gradually, and even speedily, regained her health and sight.†

I am enabled to add the particulars of a case, which lately occurred under the care of Dr. Latham, in St. Bartholomew's Hospital; it was kindly pointed out to me by my friend, Mr. Ormerod, jun.

---

* Lancet, vol. i., 1839-40, pp. 496, 7.

† Injuries of the Head, &c., p. 89. ourth edition.

A middle-aged female, some time since, was admitted into the hospital, suffering from acute rheumatism, in the course of which the endocardium became inflamed; this attack was subdued by appropriate remedial measures. This same patient was again re-admitted during the present season, complaining of anomalous pains about the joints, which, connected with her previous illness, were supposed to be rheumatic, and treated with colchicum. On inquiring into her previous history, it was ascertained that she was very liable to hysterical symptoms and attacks; this, connected with manifest present symptoms of a similar character, led to the change of treatment from colchicum to valerian. She states, that on a Monday she first became affected with loss of sight and great intolerance of light, which continued till nearly the termination of the week. The attack first commenced with severe frontal headach, pain over both brows, which she likens to the pressure of some heavy penetrating body (clavus); the sight became imperfect and confused in both eyes, with great intolerance of light; spasmodic closure of the lids, and a rotation of the globe upwards and outwards whenever an examination was attempted; the tunics were all perfectly healthy in appearance, but the conjunctiva became congested from exposure; the amaurotic derangement was attended by the sensation of globus, frequent efforts to swallow, and some sense of suffocation.

The attack was preceded and accompanied by great irritation of the primæ viæ, the bowels were relaxed, and the stools foul and offensive. The affection was subdued in a few days by the treatment adopted, but slight intolerance of light continued troublesome for some days afterwards.

THE

HUMANE SYSTEM OF TREATMENT OF THE INSANE.

To the Editor of THE LANCET.

SIR:—As Dr. W. A. F. Browne's letter to Dr. Blake, published in a recent Number of THE LANCET, contains references to the opinions of various Scotch superintendents, on the subject of restraint in the treatment of insanity, will you permit one of the gentlemen referred to by him to speak for himself. In the last report of the Royal Edinburgh Asylum, Dr. M'Kinnon states:—

"With new arrangements and increased means of occupation and amusement, I have been enabled to dispense with restraint in all the cases in which it was in use when I entered on my duties. Six patients (out of about forty), formerly under it, have remained free and unconfined in their movements since that time; nor have I ever had cause to regret the liberty given them. I do not presume to express a confident opinion on the great question which is at present being agitated on the subject of restraint in cases of insanity. I think, however, that great praise is due to those who have advocated non-restraint. Since they have directed attention fully to this subject, it has been found, more frequently than formerly, that temporary seclusion in one case, appropriate medical treatment in another, increased vigilance on the part of attendants in a third, will render it unnecessary to have recourse to what may justly be called an opprobrium of the treatment of lunacy and of the medical art. But the advocates of non-restraint have not always duly considered whether, in abolishing one form of restraint, they may not have substituted another. To employ, in cases of furious mania, the mere physical strength of numerous attendants, is not to dispense with restraint, but to apply it in an objectionable form. But quiet and seclusion; exercise or occupation by himself; moral influence, if it can be brought to bear upon him; and such medical treatment as his state may require, will generally, if not always, suffice of themselves to calm the violence of the patient. There can be no doubt that restraint has been often had recourse to where it was unnecessary, and still more frequently continued after the demand for it has ceased to exist. A patient who has been once violent, or committed an outrage, is apt to be ever afterwards regarded with suspicion or distrust by those who do not examine closely his state of mind at the time, or think of the motives which may have led him to former violence. The use of restraint, in these cases, will not go unchallenged *now* from week to week, and year to year. I think it may be safely affirmed, that there is now, universally, a strong desire to dispense with restraint as much as possible; but the construction of the asylum will render it more easy to effect this object in one case than in another. To suicidal and some other cases, the advantage of doing away with restraint, and adding to the number of the attendants, will be manifested in the increased opportunities afforded for carrying the proper curative measures into effect. In ordinary cases of mania, restraint, with proper arrangements, is unnecessary; but where violent excitement is attended with weak bodily health, and it is of consequence to husband the patient's strength, it is extremely *doubtful* whether mechanical restraint is not to be preferred to *restraint of any other kind*. In all cases, the legitimate object to be kept in view, is such an improvement of the mental condition of the patient, as shall render it unnecessary to have recourse to restraint, or any of its substitutes."

The directors of the Dundee asylum, in their report, June, 1840, also assume as a fact, that manual coercion must of necessity supply the place of that which is passive, or

mechanical. Were this incontrovertibly the natural consequence of non-restraint, I should unhesitatingly prefer the latter to the former; but I have yet to be convinced that this assumption is well-founded. My own experience proves the reverse: and, in truth, a desire to avoid the revolting outcries and superhuman struggles which I so frequently had witnessed, called into existence by attempts to impose instruments of coercion on furious maniacs, and the injuries which occasionally were inflicted by their violent and continuous endeavours to release themselves from confinement, formed the main inducement with me to relinquish its use. I shall not, therefore, reply to the arguments put forth by the directors, for the reason that those who advocate such a substitute for mechanical agency can possess no legitimate claim to the appellation of advocates for non-restraint. It is perfectly true that the attempt to remove a frantic madman from one apartment to another may sometimes be attended with considerable difficulty; but it is equally evident that such an act cannot give rise to the same degree of angry excitement that would be produced by attempts to deprive him of liberty; that it will not require the same amount of physical exertion, and that the consequent excitement will subside much sooner. The experiment remains untried, for the present, at the Dundee asylum; the opinions of its directors are, therefore, purely hypothetical. The reason may be best given in their own words:—

"The funds provided for the maintenance of the poor, at least in Scotland, are not sufficient to afford such a supply of keepers as to supersede the use of instrumental restraint. The gentlemen now engaged in conducting lunatic asylums without the use of instrumental restraint, have every claim to our respect; some of them have names of high authority on every subject connected with insanity; their motives are humane; their designs are to promote the public welfare."

In the report of the Royal Glasgow Asylum, dated Jan. 1841, the only allusion to this question is contained in the following paragraph:—

"By higher wages we have endeavoured to induce a better class of individuals to become keepers and nurses than those usually employed; and our anxiety to do away, as much as possible, with all restraint, has necessarily led to an increase of their number."

From the foregoing extracts I think it may fairly be inferred that the humane system will be fairly and impartially tested by our talented and zealous brethren in the North, and from the results of their experience I anticipate the most favourable conclusions. Its fundamental principles are fully conceded, as well as the necessity for their agitation. "The new arrangements, increased means of occupation and amusement," and number of attendants mentioned, incontestably evidence that, even in the best-conducted establishments, their high-minded conductors could find, in the suggestions of others, something to approve and adopt. These men do not gravely defend their individual systems on the ground that they have been founded by this great man or that twenty years ago, and, on the strength of their fancied superlative excellence, brand that of a dissenting brother as "a piece of contemptible quackery, a mere bait for the public ear."

Had our English asylums been directed by such men as Drs. Browne, Poole, M'Kinnon, Hutcheson, &c., nothing would ever have been heard of those utopian views, so offensive to certain individuals that they never advert to them without making sundry disingenuous efforts to garble, exaggerate, and misrepresent them to a degree that makes them their own. They would fain induce the world to believe that coercion is never resorted to excepting under circumstances so peculiar and of unfrequent occurrence, that, were the assertion founded on facts, restraint would, to all intents and purposes, have long ceased to exist. Dr. Browne lays it down as an axiom, that restraint should be used for the "cure and improvement of the patient;" yet the saving of expense, both as regards clothing and wages, is a much more frequent reason for its imposition in the *private* practice of some advocates for "mild restraints," though it forms no part of their *public* manifestoes. Again, Dr. B. says, "that restraint should never be imposed but by the orders of medical men; indeed, it is quite new to him to learn that a different custom obtains elsewhere:" yet Dr. B. might, in a convalescent division of one of the most highly-lauded of these institutions, inadvertently intrude himself into a sleeping apartment, and find the bed and floor strewn with unwieldly implements of coercion, evidently in nocturnal use; in another, he would view them dangling, in formidable array, from the walls of the keeper's room, and should some absent inmate be inquired for, hear that the patient had been so very high during the night that the attendant could do nothing with him, and that he had, therefore, been put in restraint, and was then locked up; or he might meet some unfortunate noisy frantic being, and hear the shower-bath threatened, or have to listen to directions for its administration, if the patient did not become quiet by the expiration of a given period. Now, these are not imaginary cases, they have within but a few short months fallen under my own immediate observation, and are of common daily occurrence. It is very easy for the non-resident officers of these establishments to stigmatise the views and opinions of those who have for years been daily employed, hour after hour, in the day-rooms, galleries, and grounds of their respective institutions, as utopian, absurd, and unpracticable; and the more so, if the impugners be just so far acquainted with

the practical details of such establishments, and have acquired no deeper insight into the powers of moral influence than can be obtained during an official perambulation, performed once, twice, or, perhaps, thrice a-week. They may also reprobate, with honest indignation, the improper and primitive administration of shower-baths in non-restraint asylums; especially as in some of these the baths are constantly locked, and the keys kept by the superintendent and apothecary.

From the estimate I have formed of Dr. Browne's humanity, I confess myself grieved that his reputation should be employed to bolster up a system than which none can be more diametrically opposed to his principles and practice. If he were fully alive to the bearings of the question, in justice to him I am forced to conclude that he would wave minor differences, and exercise to the utmost all the resources of his great talents and experience to obviate their existence; nor would he withhold his assent to the dictum of Dr. Stewart, of Belfast, that the system against which we contend is one "which, the sooner exploded and replaced by the total abolition plan, fraught though it may be with danger, the better, unquestionably for the patient, and the more creditable to our civilised land."

In the three cases instanced by Dr. Browne as requiring restraint, I take it for granted that in his opinion mechanical coercion proffered the *only or the best means* whereby he could attain the object he desired. In a similar position, *cæteris paribus*, I conclude that myself and others thinking with me, and as jealously keeping the legitimate end of our professional duties in view, would be forced to resort to the same measures, all others having proved, or appearing upon deliberation to be unavailing, or inadequate to the emergency of the case; but not until then would I consent to employ them, not so much from a disbelief that restraint is capable of becoming useful as a medical auxiliary, as from the conviction that its administration would afford excuse for appliance in fifty instances, where no such imperative demand for its agency existed, and that the recognised use of it as a last resource would weaken the desire to obviate and forestall the necessity. I have the honour to be, Sir, your very obedient servant,

A Medical Superintendent.

February 22, 1841.

ON THE PATHOLOGY OF PNEUMONIA.

To the Editor of The Lancet.

Sir:—Provided you deem them of sufficient value, I should feel obliged by the insertion of the following observations in reply to the "Strictures" of "An Apothecary" on my former communication. I am, Sir, your obedient servant,

Thomas Williams, M.B., &c.,
Demonstrator of Anatomy at the Webb-street School of Medicine.

In reference, firstly, to the bronchial arteries, the suggestions and inquiries of "Apothecary" have caused the renewal of investigations in which I have before been engaged, and the revival of notions which have been long entertained in regard to their uses in the economy of the lungs. In ordinary dissections it has oftentimes occurred to me, from the small diameter of the bronchial arteries, that the quantity of blood necessary for the nutrition of the parenchymatous structure of the lungs, *could not* be conveyed through channels of such limited calibre; and examinations recently instituted leave the extent of their distribution, and, consequently, their office, with myself, no longer questionable. The section of the bronchial vessel on one side immediately at its origin from the aorta, and forcibly turning up the root of the lung, will readily allow the introduction of the pipe of the injecting apparatus into its divided end, and thus enable us to confine the injection to its branches. In order to render the result of these anatomical experiments the more conclusive and striking, I detached the lung upon the opposite side, and injected the pulmonary artery alone. If, now, sections of the prepared lungs be made from the root, and in the course of the bronchi towards the circumference, and contrastively inspected, a remarkable difference will be immediately observed. In the lung, of which the bronchial vessels only were distended with injections, the vascularity is seen to be dense in the common tissue and glands encircling the roots of the lungs, and not to extend in the direction of its periphery in visible form much further than the larger divisions of the bronchi. By a closer examination, minute branches, however, may be traced to some distance. Viewing the section generally, the injection was seen to be limited to the cellular tissue about the primitive divisions of the larger vessels: in that which the pulmonary only was charged with injection, it was seen to have diffused itself throughout the whole extent of the lung's substance; all the parts, however, towards the base, in which the bronchial absorbents and common tissue are lodged, and likewise considerable portions, in the course of the larger vessels of bronchi, had received a very small portion of injection. It is necessary to remark, that the uninjected portions in this lung correspond in limits with those which, in the other, are occupied by the ramifications of the bronchial arteries. The calibre of the bronchial vessels at their origin is not to be taken as a correct datum from which to compute the quantity of blood entering the lungs, for, soon after their commencement, branches of considerable size are

detached for distribution upon the œsophagus, the bronchial glands, the posterior surface of the pericardium, and cellular membrane in the posterior mediastinum. This off-set of branches considerably reduces the size of the original trunk, the continuations of which are now observed in contact with the bronchial tubes. If a definitive distinction physiologically existed between the respective offices of the bronchial and pulmonary arteries, it ought confessedly to bear the test of anatomical examination; and as the whole edifice of physiological science owes its present imposing dimensions to the successful prosecution of anatomical research in which its roots are intimately spread out, anatomical proofs, in the weight which they carry, cannot be disregarded.

If it were a law of general operation in the economy that the secreting functions of every viscus, and the nutrition of its parenchyma, required for their performance independent systems of vessels, other organs than the lungs ought to present us with illustrations. The examples of the kidney, liver, spleen, and probably the brain and testicle, teach that the union of the two functions in one set of vessels is quite consistent with the proper execution of both. In relation to the kidney, it is known that no artery, in addition to the emulgent, enters its substance; that this vessel, therefore, accomplishes the twofold object of affording material for the nutrition of its structure, and that likewise from which the gland elaborates its peculiar secretion, must at once appear undeniable. The spleen receives no other vessel than the splenic artery; and whatever be the character of the changes impressed upon the blood in its interior laboratory, it is certain that it combines in its office the double function of nourishing and secreting: and in reference to the liver, it is well determined that the hepatic arteries and portal veins communicate with freedom at their extreme branches; showing them thus to end in common in the network of capillaries, from which the venæ cavæ hepaticæ proceed. This common termination proves a community of office in the blood of the two systems,—that the same compound blood, that is, while it provides the source of its peculiar secretion to the liver, conveys the means of nutrition: taking, therefore, this reasoning from analogy in conjunction with the proofs which anatomy furnishes, the inference is necessary, that the capillary system of the pulmonary artery laid out in the lungs, must have for its objects to subserve the purposes of respiration, and likewise to afford nourishment to the structure of the lungs. It is no objection against this view to state, that the pulmonary artery circulates blood disqualified, by the carbon contained, for the work of nutrition, because it undergoes the aerating changes at the very beginning of the pulmonic capillaries. If the fact be remembered that the term parenchyma is scarcely applicable to the lungs, since they are made up only of an aggregation of cells, with the capillaries of the pulmonary artery ramifying upon their walls, the denying to the bronchial arteries the business of nourishing the lungs, will appear the more reasonable.

Dr. Budd is the only writer with whom I am acquainted who has attached distinctive importance to the bronchial vessels in the study of pulmonary disease. He endeavours to account for the general difference between bronchitis and pneumonia, on the supposition that in the former the bronchial arteries are the subject of inflammation, while in the latter the diseased action is limited to the proper pulmonic capillaries. With respect to the difference between these two affections, it may be explained in another way. It is known to every observer of disease, that the same part, the same network of capillaries under inflammation, may present apparently various forms of disease. In addition to which, the position of Dr. Budd is rendered indispensable by the one circumstance, that it is physically impossible for the bronchial capillaries, however infinitessimal the size into which they reduce, to occupy the area presented by the mucous surface of the lung, or follow out to its remotest end each bronchial tube. The aggregate area of the pulmonic capillaries, according to Dr. Young, is equivalent to two-thirds of that occupied by the branches of the aorta; and as they can *no more* than cover the bronchial tree with its terminal cells, our ideas become rather refined, if we suppose the bronchial arteries capable of such extensive distribution; but during uterine life the pulmonary vessels are complete in their formation. At this period of existence, I have no doubt that they fulfil a present and definite purpose, which can alone be the affording nutrition to the lungs. If their uses were wholly prospective of respiration, it would break up our views of the frugality with which nature employs her resources.

The inquiries of "Apothecary," therefore, in regard to the vessels affected in pneumonia, find their reply in my former communication; in which it is stated, that since there is only one system of capillaries in the general substance of the lungs, doubt can no longer be entertained about the seat of pneumonia.

The next question which the "learned critic" raises, respects the mode in which the sputum in pneumonia becomes tinged with blood. To go at length into this subject, were to argue the doctrine of hæmorrhagic effusion. That liquor sanguinis, under certain circumstances, possesses the power of dissolving hæmatosine, is evident, from the facts that water, unimpregnated with saline ingredients, dissolves the colouring matter of the corpuscles, and destroys their discoid figure, while the presence of a neutral salt will effectually protect them from its solvent action; and

Kaltenbrunner, who is accreditedly the most accurate observer of the changes which the blood undergoes in the capillaries in inflammation, remarks it as an invariable circumstance, that the red particles lose their proper figure, and coalesce into a mass: as, therefore, by analysis, the product of inflammation can be shown to possess a diminished proportion of saline material, it is most probable that it acquires the power, like water, of dissolving the colouring envelopes of the corpuscles; and in regard to the sputa in pneumonia, so far as my limited observations extend, in the red tinge of the expectorated matter the eye cannot single out any well-defined red particle, the colour appearing intimately broken up, and uniformly diffused throughout the viscid mass in which it is contained. Whatever be the mode of escape, I must repeat my belief that the red particles cannot as such transude the parietes of the capillaries; and Müller himself, whom "Apothecary" quotes in another portion of his work, emphatically supports this doctrine. The distinction between liquor sanguinis and serum, to which I attached such importance in the study of inflammatory deposit, appears to my erudite reviewer subtle and even paradoxical, and has given to his inventive imagination such creative force as to elicit a pun, every person must know that liquor sanguinis "being composed of fibrin in solution in the serum must contain albumen." But it is somewhat different to state that serum, properly so called, contains neither fibrin nor liquor sanguinis; it is obvious, therefore, that serum cannot be identical in composition with, or analogous in, property to liquor sanguinis. Independently, however, of its accuracy as a mere question of organic chemistry, I rested the importance of the distinction upon the fact, that liquor sanguinis has the power of spontaneously coagulating, while serum evinces no such property. But upon this subject the "Apothecary" accounts for his "little learning," by confessing that he is a remnant disciple of some antique and extinct sect in physiology. In respect to his remaining suggestions, I have to thank "Apothecary," and remark that proper attention to them will occupy a little longer period than a week.

FATAL PUERPERAL CONVULSIONS SUCCEEDING LABOUR.

To the Editor of THE LANCET.

SIR:—Will you be so good as to allow me to lay before your readers the facts of the following case, which has caused, in this neighbourhood, considerable excitement. I would premise, that I am a young practitioner, commencing my labours under all the disagreeable concomitants which jealousy and opposition engender. I feel, however, so perfect a confidence in the mode of treatment which I adopted in this particular case, that I solicit the opinion of any of your numerous correspondents. I trust that this communication will not be considered an obtrusion upon your columns. I have the honour to be, Sir, yours very respectfully,

PETER SCOTT, Surgeon.

On the 22nd of February, I was called upon to attend Sarah Powell, aged 25, in labour with her first child. On my arrival, at two o'clock, A.M., I found her walking about the room, with pains strong upon her. By my earnest entreaty she was prevailed upon to get into bed; whereupon "I took a pain," and ascertained that all was progressing most favourably, and had every reason to expect a comfortable and speedy delivery.

At seven o'clock I delivered her of a fine male child; and within the next half-hour the placenta altogether came safely away. Seeing her quite comfortable, I left her; and five hours afterwards, on calling again, was told that she had been sitting up in bed nursing the baby; having cautioned her against making too free with herself, and having administered an aperient draught, I again took my leave.

About ten, P.M. I was hastily sent for, and found my patient in very strong epileptic fits, violently convulsed, and in a high fever. On inquiry, I ascertained that the aperient draught had been rejected by the stomach, and that the bowels had not been moved for two days. A more healthy and robust woman I never saw, and as she was of a full habit, I immediately took from her twenty ounces of blood, which seemed, in a small degree, to abate the violence of the attack, and she became gradually more quiet; I then left her: within two hours after, however, the fits returned with greater violence than ever, insomuch that three persons were unable to hold her down in the bed; they continued upon her, without interruption, till she died: her death took place within twenty hours after her delivery.

Such is the plain statement of this case; and I respectfully submit, whether, under the circumstances, I could have pursued a different treatment. P. S.

Mansfield, Stockwell-gate, Notts,
March 8, 1841.

GALVANIC TEST FOR ARSENIC.

To the Editor of THE LANCET.

SIR:—Having recently read an extract from a medical periodical, stating that metallic arsenic might be precipitated from arsenious acid, and several other compounds into which it enters, by forming a simple gal-

vanic circle with a capsule of platinum and a piece of zinc; and having, by experiment, found such to be the case, I was, in consequence, led to expect that a similar result would be obtained by employing gold, instead of platina, as the negative metal. Accordingly, I took a small quantity of arsenious acid, about 1-50th of a grain, placed it upon the surface of a sovereign, moistened it with a drop of muriatic acid, then touched it with a narrow strip of sheet zinc, and, after a few seconds, had the satisfaction to observe that a distinct metallic film or deposit had formed upon the part of the gold which had thus been brought in contact with the wire. I found, too, that the metal was precipitated from realgar, when heated in the same manner as arsenious acid; and I have but little doubt that, if thus tested, most of the compounds of arsenic, as well as fluids containing them, would afford precisely similar results.

If, after obtaining the metallic deposit in question, we let fall upon it a drop of nitric acid, it immediately dissolves, and may then be tested by any of the ordinary re-agents, such as the ammoniacal nitrate of silver, ammoniacal sulphate of copper, &c.

Thus, then, we are furnished with a very simple and elegant method for detecting the existence of this important metal; and one which, when employed in conjunction with other tests, will, I trust, be found of value to the medical jurist.

Thanking you for the insertion of my former paper on Marsh's apparatus, I have the honour to remain, Sir, your most obedient servant, W. H. O.

St. George's East, Feb. 23, 1841.

CONGENITAL DEFICIENCY OF THE RIBS.—PROTRUSION OF LUNG.

To the Editor of THE LANCET.

SIR:—If you think the following case worthy of the perusal of your readers, you would much oblige me by giving it a place in your valuable Periodical.

Hannah Barker, aged 7, an inmate of the Chelmsford union-house, was admitted into the hospital the 26th of last month, labouring under a severe cough, attended with great difficulty of expectoration; and, on my making an examination of her chest, the following abnormal appearances presented themselves to me. On desiring her to cough, I saw a round, globular body filling up that space generally occupied by the mammæ in an adult, on the right side of the sternum; which, on closer examination, proved to be a portion of the right lung, which, on coughing or violent inspiration, was protruded, in the manner I described, forwards, owing to the congenital absence of the second, third, and fourth ribs. The pleura appears much thickened; and, on applying the ear to that side of the chest, you hear the crepitating râle very plainly.

The spine is perfectly natural, having no curvature whatever; but her general appearance denotes a sickly state of habit, with anxious and bilious cast of countenance. I am, Sir, your obedient servant,

W. B. M'EGAN, M.D.

Chelmsford, March 9, 1841.

P.S.—I merely send you a very rough draft of the case (taken on the spot), and trust you will make allowances for the imperfect mode of description; my only object being (as I think should be the case with every medical man), of bringing before my professional brethren any case of interest like to occur in my practice.

OPERATION FOR THE CURE OF STAMMERING.

To the Editor of THE LANCET.

SIR:—In the daily papers of last week and this, various paragraphs occurred on the surgical cure of stammering, of operations made on boys, and lectures delivered on this subject. The discovery, however, of this method of curing stammering is quite new; and it can hardly be supposed that a sound knowledge of it should have reached already this country, whose medical gentlemen are, generally, not acquainted with German. The discovery was only, in the beginning of this winter, made by Professor Dieffenbach, of the University of Berlin, who is highly distinguished in his profession, and made several surgical discoveries, *e. g.*, concerning the cure of squinting. In January last the Hamburg Correspondent mentioned the recent discovery; and, in the same month, I received a letter from a friend, of Berlin, containing the following notice:—"Our Professor Dieffenbach made another useful discovery, viz., to cure stuttering and stammering, by dividing certain muscles of the tongue. He makes no secret of it, but read a paper on his method in the Society of Physicians of Berlin, and operated himself, in presence of a number of medical gentlemen, on a stammering lad. When the wound had healed, the same gentlemen again assembled at the professor's, when the lad read from a book quite easily, and without impediment. As the professor lodges in the house of a friend of mine, I had ample opportunity of satisfying myself of the truth of the statements in our daily papers."

On hearsay information, no surgeon should undertake the operation on so delicate a part of the human body as the tongue. It is not enough to know the names of the muscles to be divided, but much depends

on the place and deepness of the incision. An unskilful operation may bring on inflammation and death, or cure but imperfectly, stammering. It will be recollected that death ensued when, some time ago, a London surgeon undertook to cure deafness, on the plan recently discovered, and ever since successfully practised in Germany. Another London surgeon undertook to cure squinting on the German plan, but destroyed the eye-sight entirely. Surgeons should procure one of the various able publications, already published in Germany, on Dieffenbach's system of curing stammering; and apply, if they do not understand German, to some person competent to explain it. I should myself be ready to assist respectable surgeons in getting a sound knowledge of this system; at the same time, regretting that they are not more generally acquainted with German. With a view to diffuse medical knowledge by the study of German, a university of that country last year passed the resolution, that to any foreign gentleman, combining with knowledge in medicine and surgery an acquaintance of German, the doctor's diploma should be granted.

John von Horn, D. D., of the University of Göttingen, Hanover.

8, Catherine-street, Strand.

WINDOW-TAX ON HOSPITALS.

The following is the case referred to in the letter on the window-tax on hospitals, published in The Lancet on the 27th of February:—

No. 1154.

At a meeting of the Commissioners of Assessed Taxes, for the district of St. Margaret and St. John the Evangelist, Westminster, held on the 6th day of July, 1836, at the Swan Tavern, in Bridge-street, Westminster.

(48 Geo. III., c. 55, Sch. A. Exemptions, Case 2.)

John Frederick Wilson, secretary to the Westminster Hospital, appealed against the surveyor's charge of 5*l.* 15*s.* for two quarter's window-tax, for the year 1834, upon thirty-four windows.

It appeared that this was a charge upon Mr. Wilson, in his character of secretary to the said hospital, for thirty-four windows, in divers rooms in the hospital, occupied by officers, servants, and the general business of the governors of the hospital, taken upon an aggregate, and charged upon the progressive duty for six months, ended at Lady-day, 1835.

It further appeared, upon the examination of Mr. Wilson, that the only apartments occupied by him consisted of two rooms, comprising together only three windows.

As the hospital is entirely supported by voluntary contributions, the commissioners were of opinion that the appellant, as secretary, was not liable to be charged for more than the said three windows in the said two rooms occupied by him, and reduced the assessment upon him accordingly, charging him at the rate of 1*s.* 9*d.* for each window.

The surveyor being dissatisfied with the commissioners' opinion, requested a case for the judges' opinion, upon the following grounds:—

The premises in question have been erected from funds obtained by charitable bequests and voluntary contributions. They are used solely for the reception and treatment of invalids gratuitously. The charge has been made for windows in the rooms (forming a part of the building) occupied by the officers attached to the institution, as follows, viz.:—

	No. of Windows.
Officers' dining-room	3
Porter, surgery-man, and bath rooms	2
Apothecary's sitting and sleeping rooms	3
House-surgeon's sitting and sleeping rooms	2
Chemical assistants' ditto	2
Secretary's ditto	3
Board-room	5
Matron's sitting and sleeping rooms	5
Cook and housemaids' ditto	1
Nurses' ditto	8
	34

We have, therefore, signed this case accordingly.

George R. Malme, } Commis-
H. Freeman, } sioners.

Dec. 2, 1836. We are of opinion that the determination of the commissioners is right.

J. A. Park.
S. Gaselee.
W. Bolland.
J. Williams.

CONGENITAL DISLOCATION OF THE HIP.

M. Bouvier presented two specimens of this interesting disease to the Academy of Medicine. In the one, from a woman, 76 years of age, the head of the femur had formed a new socket upon the dorsum of the ilium, the acetabulum being almost obliterated; in the other, the head of the femur is connected with the ilium, by means of the fibrous capsule, only without immediate contact. The displacement had occurred on both sides.

THE LANCET.

London, Saturday, March 27, 1841.

A Bill, intituled an "*Act for the better "Drainage and Improvement of Buildings in "large Towns and Villages,*" has been recently submitted to the House of Lords by the Marquis of Normanby; and although much has been assailed, and is, perhaps, objectionable, in the details, the utility of some general law of the kind is admitted by all parties. It is an unquestionable fact, that, in the words of the preamble, "there "is *great need of Sanatory Regulations in the "Towns and populous Places of this Realm*;" and that "disease is engendered and aggra- "vated by reason of the crowded and un- "healthy manner of building the dwellings "of the working-classes, and for want of "sufficient means of drainage." We have frequently called attention to the neglect of sanatory measures, and to the deplorable indifference which has been displayed wherever human life, and not property, has been at stake; or, in other words, wherever the physical happiness of the people has not been directly involved in the privileges and the pecuniary interests of the rich. The commerce, the manufactures, the landed interests, the church, the territorial possessions, the national honour in our relations with foreign states, have never lacked zealous advocates, and have always been able to command the attention of the State; but the registration of the causes of deaths, the Vaccination Act, and the present Bill, are the only marks of solicitude shown for the public health, during many years, by any of the successive Governments of the country.

Under these circumstances, had we not been pre-occupied with Medical Reform, we should have deemed it our duty to discuss the provisions of the present Bill earlier, and have hastened to acknowledge the promise of a better state of things; to give the noble Marquis, the Secretary of State, credit for the enlightened views expressed in his speech, and to do justice to his good intentions. But we are convinced that Medical Reform is the basis of all Sanatory Reform. It is the "tree of life" in the midst of the garden, and upon its salutary branches the precious fruits of health will grow and ripen. The causes and laws of disease have all been investigated by the Medical Profession, who will discover what is still unknown, and must bring home the facts in their works, in the intercourse of life, and in practice, to the minds of the people. While the corrupt Medical Corporations exist, and the hospital monopolies are maintained,—while the medical practitioners of the country are oppressed, insulted, and neglected—while the examinations are neither impartial nor practical, and medical honours are unfairly distributed, the sanatory state of the country must be poisoned at its source.

Having a regard, then, only to the public health, we must ever consider Medical Reform foremost in importance; and we are ready to confess that after the need of sanatory regulations, as well as the calamities resulting from their neglect, have been recognised by the Marquis of Normanby, the Bishop of London, Lord Ellenborough —leading men of both parties—the apathy of the Legislature does appear to us inexplicable. We stated, last week, that when Mr. Hawes moved the second reading of his Medical Reform Bill, the House of Commons was counted out; only *thirty three* members was present. We are very far from contending that the Bill of Mr. Hawes was introduced under favourable auspices, or that it is the best Medical Reform Bill which can be produced; but the immense importance of the subject should have secured a full House, and a careful discussion. All the circumstances of the evening of that day—the first day and the last day of the kind we would fain hope—were sufficiently humiliating, and calculated to produce a very degrading opinion of the repre

sentatives of the people. In the early part of the evening the second reading of the *Stafford and Rugby Railroad Bill* (a private bill) was moved, and 248 members were present at the division. Subsequently, Lord GRANVILLE SOMERSET moved that the *members for the county of Monmouth be added to the Committee on the Severn Navigation Bill;* upon this motion 201 members of the House of Commons divided. The bearing of these two matters upon the public interests—the welfare of the nation, or the happiness of mankind—was not very intimate; and it certainly was not of *very* great importance to the people of England, whether the "members for the county of Monmouth" were or were not added to the Committee on the Severn Navigation Bill—whether there were two lines or one line of railroad between the important towns of Stafford and Rugby; yet, 201 and 248 of their representatives were induced, by some means, to vote upon these questions. Sir ROBERT PEEL did not disdain to speak on the Rugby Railroad Bill, and to denounce monopolies in round set terms; nay, more, his noble friend, Lord STANLEY, arrayed his gallant audacity and talents in debate at the head of the opposition. PEEL *and* STANLEY "led us." The trammels of party were thrown aside, so great was the occasion!

All this was *private* business. No sooner had the *public* business commenced, and a measure been brought forward, upon which numerous petitions had been presented, which involved the rights of 20,000 members of a learned profession—the public health—the dearest interests of every individual living in the empire—than PEEL, STANLEY, the Government, the Opposition, and the Ministers deserted their seats, and vanished. A vote disappeared at the end of every sentence uttered by the speakers; "*members* fell at every blow;" and Mr. DARBY—the advocate of the Corporations—gave the finishing stroke, and put the seven less than "forty" to flight. All this looked badly, and was calculated to bring contempt upon the House of Commons, which it made to appear to devote attention to measures in the inverse proportion of their public importance. But the number of members present at the *private* business was by no means a casual occurrence; effects never occur in the House of Commons without causes; and there can be no doubt that, as the Medical Profession can command as much interest as a Railway Company, they may, if they will employ equal energy, and the same means, command the attendance of an equal number of members.

If the Government has not thought proper to introduce a Medical Reform Bill, or to countenance the efforts of the hon. member for Lambeth, the SECRETARY OF STATE, as we have seen, is not insensible to the advantages of Drainage. Her MAJESTY'S Government have commenced with the sewers and the privies. Medical Reform will necessarily come in its turn. They are in a fair way to the Corporations. We put it, however, to the Cabinet Ministers in general, and to Mr. MACAULAY, the honourable member for Edinburgh, in particular, whether the *cabinets d'aisance* are really the greater nuisance, or, at any rate, merit precedence of Rhubarb Hall and Pall-Mall?

Regretting, as our readers must, that the Marquis of NORMANBY did not deem it proper to begin his sanatory reforms by reforming the self-elected Medical Corporations, and that he has left Mr. HAWES alone in his glory, like the man on the sign vainly washing the Ethiop white, they will, probably, have no objection to sweeten the imagination by a visit to the purer atmosphere of Whitechapel and St. Giles's.

It appears that in Whitechapel, St. Giles's, Holborn, the City of London without the walls, Southwark, and other localities of the same description, the mortality is 3 or 4 in 100 annually; while it is 1¾ and 2 in 100 in St. George's, Hanover-square, the City of London, Hackney, Islington, St. James's, Camberwell, and open agricultural districts. The average duration of life is not twenty-five years in parts of the metropolis, while it should be

fifty or sixty; and *is* fifty years, where ordinary precautions are taken, or where, from accidental circumstances, animal and vegetable poisons are diluted.*

The state of the districts of the metropolis where the mortality is high, is well described by Mr. PENNETHORNE, the surveyor, who has been engaged in the various improvements of the metropolis, under the Commissioners of Woods and Forests; and who had occasion to survey the districts of St. Giles's, Essex-street, Whitechapel, and parts of Safforn-hill.

"There is no under-ground drainage of any sort or kind to many of the districts; not to the St. Giles's and to the Spitalfields' districts; and the drainage to that north of Farringdon-street is by an open ditch, which is quite as bad as no drain, if not worse. * * The districts above referred to are composed almost entirely of small courts, very small and narrow, the access to them being only under gateways; in many cases they have been larger courts originally, and afterwards built in again with houses back to back, without any outlet behind, and only consisting of two rooms, and almost a ladder for a staircase; and those houses are occupied by an immense number of inhabitants. I have seen three and four beds in each room; they are all as dark as possible, of course, and as filthy as it is possible for any places to be, arising from want of air and light. * * The width of the courts will average ten feet. * * In Rose-lane, which is, perhaps, one of the best streets about that part of Spitalfields, I have seen the place completely flooded with blood from the slaughter-houses. * * In some of the better parts, where the houses have small back yards, they were in such a filthy and dirty state, that we positively could not walk out in them. * * There is apparently no inspection to secure a good system of cleansing and scavenging. * * The privies and places in which they cast the refuse can hardly be called privies; in many cases they are only a few boards tacked together, and sometimes we could not find where the privy was, and doubted whether there was such a thing in all the court; and generally we found only one appropriated to each court. * * The inhabitants appeared to be living in such a state of filth and dirt, that they thought of nothing in the shape of cleanliness."†

We know from personal observation, and the medical practitioners of the districts are well aware, that the description is not overcharged.

With reference to the present Building Act, the witness was asked,—

2827. There is a Building Act applicable to London?—There is.

2828. The chief provisions of that Act are, that there shall be party-walls of a certain thickness to prevent fires, and there are some rules to prevent over-hanging buildings?—Yes, and encroachments on pavement.

2829. Are there any regulations forbidding certain forms of buildings, which are found by experience to be injurious to the health of the inhabitants, or any rules to prevent houses being built back to back, or any thing of that kind?—No, nothing of that kind.

The ignorance of the effects of crowding, and of filth, not only on the inhabitants of cities, but on the entire population, who suffer, more or less, from the epidemics brewed in the cauldrons of disease just described, explains the defects of the early Building Act.

The Marquis of NORMANBY proposes to remedy the defects of the Building Act. By his Bill no house is to be erected with a room below the level of the ground, unless there shall be an open area not less than three feet wide from the bottom to the top thereof, adjoining to the front and back of such room or cellar. This provision is directed against the cellar-dwellings of the poor cimmerians of Liverpool, Manchester, and other large towns.

The gloomy race, in subterranean cells,
Among surrounding shades, and darkness dwells,
Hid in the unwholesome covert of the night.

No house is to be built in any court or alley through which there shall not be an open space at least *twenty feet wide*, and entirely open from the ground upwards; and there is to be a clear space of *twenty feet* between the back walls of houses; the walls are to be founded on concrete; the level of the ground-floor is to be at least eighteen inches above the level of the road; yards and privies are to be attached to every house; surveyors are to be appointed to see that the provisions of the Act are carried into effect.

* Reg.-Gen. Report, 1838-39, Appendix.
† Rep. of Com. of House of Commons on Health of Towns.

The attempt to regulate the size of rooms and certain other minute regulations will be unsuccessful; they will be evaded, perhaps, mischievous; but we shall not notice them, as the Bill has been referred to a committee, and will, no doubt, be amended in these respects. The provisions of the law with respect to sewerage are exceedingly defective; the present Bill proposes to give ample powers to the Commissioners of Sewers. No house is to be built in any town or village having more than —— thousand inhabitants, unless a brick or stone-barrel drain be first constructed to the satisfaction of the Commissioners of Sewers having jurisdiction therein; and drains are to be constructed for houses already erected. The Commissioners of Sewers are to be empowered to clean any sewers, drains, watercourses, and privies; also to lay down sewers, and to drain and cleanse stagnant ponds, marshes, and other nuisances, whereby the health of the neighbourhood is likely to be affected. Before making any new sewer the Court of Sewers is, however, to inquire by *jury* concerning the need of making such a sewer, or concerning nuisances in he manner provided by the *Act to amend the Laws relating to Sewers*, 3 and 4 W. IV., c. 22. Private drains are to be cleansed by occupiers.

We shall not now inquire into the machinery of the Bill, or the modes and penalties by which its provisions are proposed to be enforced; but there can be no doubt that the constitution of the present Boards of Sewerage is exceedingly unpopular. The Boards are in some cases irresponsible, and not at all qualified in any way to take disinterested or enlightened views of the subjects entrusted to their administration by the present Bill. Why did the Government shrink from grappling with some of the Commissioners of Sewers in the metropolis?

In his speech, the Marquis of NORMANBY evinced a very just notion of the importance of matters connected with the public health, and supported the general argument with great ability, although not upon the best authority, or the most accurate calculations. He trusted too implicitly to the statements of certain semi-charlatans, examined by the Committee, of which Mr. SLANEY was chairman; who did not display so much discrimination as benevolence, and did not possess so intimate a knowledge of the subject as could have been desired. The Report contains much valuable matter; but it is overloaded with the trash, theories, and assertions, against which Parliamentary Committees have to guard in inquiries of the kind, because quacks of all grades, unless resolutely repulsed, obtrude themselves therein to acquire a little notoriety.

The noble Marquis referred to *Boards of Health*, in terms which would lead us to hope that these valuable institutions will be established in connection with the Faculty.

The Marquis of NORMANBY's Bill has been divided into two Bills; one of which—the *Boroughs Improvement Bill*—has been read a second time, and referred to a Select Committee.

Memoir on the Radical Cure of Stuttering, by a Surgical Operation. By J. F. DIEFFENBACH. Translated by JOSEPH TRAVERS.

MR. TRAVERS has done good service to medical science, by the translation of Dieffenbach's paper upon an operation which is now exciting much interest in our metropolis. And he also deserves credit for confining himself to the simple duty of a translator, and avoiding the too common usage among translators of the present day, of thrusting himself with officious effrontery between the author and the reader, to gratify his own especial love of approbation. Mr. Travers, we repeat, has kept aloof from so contemptible a practice, and with a manly independence contents himself with that which he rightly deserves,—the approbation of the thinking of our profession, of those whose applause is a real reward. How differently have the discoveries of Dieffenbach been treated by others, pretenders to medical science, who, under the veil of a Lincoln's Inn-fields diploma, and the patronage of a few ignorant scribes, have been dealing largely in quackery and humbug. It needs not our pen to unmask the unprofessional and contemptible proceedings of some who have sworn to uphold the dignity of the body to which they belong; but as our pages are perused by the general public as well as by

the medical practitioner, we deem it a duty to the former to warn them of such base proceedings. Do the public hear of tongue-cutters, and frænum-cutters, and tonsil-cutters among the surgeons of our hospitals, among the Brodies, the Listons, the Arnotts, or the Keys—among surgeons of unquestioned reputation? No; they are known only in the advertising columns of the daily papers, among the Morrisons and the Eadys; or in the ephemeral pamphlets of the hour, that scarce outlive their day of publication. But to our work.

"The idea lately suggested itself to me," says Dieffenbach, "that an incision carried completely through the root of the tongue might possibly be useful" in stuttering, which had resisted other means of cure, "by producing an alteration in the condition of its nervous influence, allaying the spasm of the chordæ vocales, &c." A most unphilosophical beginning, truly, and one which speaks strongly of the discipline of the German hospitals, and possibly of the little danger of an inquest on unsuccessful practice. One thing is certain, that an idea so conceived would be regarded as most unwarrantable in its application in British hospitals. Nor is the case improved, when he explains that the first thought of the operation originated in a patient with strabismus one day requesting to be operated on for that deformity, with a "well-marked stutter." But he continues—"the brilliant success of this new operation more than realised my most sanguine expectations."

The principle which the professor has in view, is the division of the nervous filaments distributed to the muscular substance of the tongue, under the impression that some undue excitation in these nerves induces the spasmodic movements of the muscles. That this effect may result from the operation is more than probable; but it appears to us that the method of arriving at the end in view is exceedingly clumsy. If mere alteration of the innervation of the muscles of the organ be the object, why not, by a much more simple, incomparably less severe, and less dangerous operation, at once divide the hypoglossal nerve or nerves as they rest on the hyo-glossus muscles; an operation requiring a superficial incision of scarcely an inch in length.

The author prescribes three methods of operating. "1. The transverse horizontal division of the root of the tongue. 2. The subcutaneous transverse division, in which the mucous covering of the tongue is left inviolate. 3. The horizontal division with excision of a wedge-shaped portion."

"The first operation I performed on the 7th of January, 1841. I chose for this case the method by which a wedge-shaped portion is removed from the posterior part of the tongue; for, as I have remarked, I felt more confidence in this than in the other methods.

"Frederick Doenau, a highly intelligent and talented boy of thirteen years of age, had stuttered from his earliest childhood, and to so painful an extent, that the defect was thought to be quite incurable. It varied, however, much in degree: when at the worst, he was unable even to produce a sound. He stuttered in Latin and French, as well as in his own language—sometimes on one set of words, and sometimes on others. The pronunciation of the sibilant letters (s, z, ss,) and of the palatals hard (g, k, ch, and x,) was attended with particular difficulty; and he made no distinction between the hard sounds, p, t, k, and the soft ones, b, d, g (German). He repeated the same letter often four times running; and when he whispered, he stuttered as much as when he spoke loud or shouted; often he could either not speak at all, or produced only half articulate sounds. The presence of a stranger invariably affected him in a manner most painful to behold. His face became distorted; the alæ of the nose worked convulsively; his lips moved quiveringly up and down; his eyelids were expanded into a wild and eager stare; the tongue was now stiff, now played convulsively within the mouth; and the muscles of the throat, larynx, and trachea were sympathetically affected. Thus, after terrible efforts, the boy gave utterance to a mangled and imperfect word;—now for a time was his speech free, and words chased one another with incredible velocity, till confusion ensued amidst the thronging sounds; and the same painful scene was thus again and again renewed. The peculiar physical horror which constitutes a stutterer, and which is excited by the effort to speak, is very similar to that which gives rise to the excitement and spasm of the hydrophobic patient at the sight of water. This internal movement might, on that account, be called phonophobia.

"The boy's mother caught eagerly at my offer to make an effort to cure him; accordingly, with the assistance of Drs. Holthoff and Hildebrandt, the operation was performed as follows: The boy sat with his head leaned against the breast of an assistant; the tongue being protruded as far as possible, was grasped on its anterior half with the forceps of Müzeux being thus compres-

sed laterally, and drawn forwards by one assistant. The gentleman against whose breast the boy's head rested, retracted the angles of the mouth with a pair of blunt hooks. Grasping now the tongue as near to its root as possible, between the thumb and forefinger of the left hand, I passed the bistoury through it, and divided it completely from below upwards; a strong ligature passed through the posterior edge of the wound, served to fix it temporarily, and prevent too great a strain upon the slender band which alone connected the mass of the tongue to it; the anterior lip of the incision was now grasped, and laterally compressed between the modified hare-lip forceps, and a wedge-shaped slice excised out of the whole thickness of the tongue. It will be found more convenient to make this second incision from above downward, and with a small straight knife. The posterior edge of the wound was now, by means of the beforementioned ligature, and a sharp double hook, drawn so far forwards that the needles with the ligatures could be conveniently passed through it; six strong sutures served to bring the edges of the wound together, and to restrain the hæmorrhage. To effect the latter object, they must include the whole depth of the wound within their loop. That the hæmorrhage was considerable, may be imagined from the nature of the operation, which should not be attempted by all persons indiscriminately. As soon as the boy's mouth was washed out, I desired him to pronounce some of those words which he had before found especially difficult; he did so without stuttering or hesitation. The distortion of the face, however, continued; the patient was put to bed, and a cooling plan of treatment ordered. With the exception of a slight sympathetic febrile disturbance, the swelling of the tongue, that one might anticipate, and the consequent impeded deglutition, nothing remains to be noticed, so far as regards his recovery from the operation itself. His features, and his mouth especially, were still much distorted when he spoke, but the stutter had entirely ceased. On the fifth day I removed three of the sutures; during the next twenty-four hours the swelling of the tongue had visibly decreased, and I then removed the three remaining sutures. On the seventh day the wound was completely healed, the back part of the tongue alone was very inconsiderably swelled, and the boy quite re-established. At this present time, not the slightest trace of stuttering remains, not the slightest vibration of the muscles of the face, not the most inconsiderable play of the lips. His speech is throughout clear, well-toned, even, and flowing. Neither inward emotions nor unexpected external impressions, produce the slightest hesitation; he can speak, read, and entertain himself indifferently with friends or strangers."

"The total number of stutterers that I have relieved up to this time is sixteen, and those who are as yet under treatment appear to promise equally favourable results."

The following paragraph is deserving of serious consideration, not less on the part of those afflicted with the serious inconvenience in question, but also by the operator. We are informed that in an operation for stuttering, performed a short time since in London, the hæmorrhage was fearful.

"In this operation it is more difficult to prescribe for the individual modifications of each particular case, than in the operation for strabismus, and it can never be performed by one who has not the temperament of an operator: the hæmorrhage must hold all others at a respectful distance. The extent and importance of the operation, the possible danger to life, or loss of the tongue, either through the want of skill in the assistants, who may tear it off when so nearly separated, or through mortification or ulceration of its connecting isthmus. These are contingencies rationally to be feared, and which must be carefully weighed beforehand."

Professor Dieffenbach concludes with a few words of criticism upon the herd of imitators who follow in the wake of talent, which are worth perusing, especially as they are evidently intended as a satire upon the instrument-discoverers, and new-method-incubators of squint-cutting. Thus he observes,

"Amidst the prevailing rage for modifying operations, I foresee that my having described the three principal available methods, cannot fail to open to surgeons a vast field for the discovery of modifications, and the creation of instruments. We shall have conical and oblique incisions, from the surface and under the skin! Actual and potential cautery! We shall have knives and scissors with improved curves, and a thousand variously-fashioned forceps and hooks. They will set the blades at angles with the handles to allow of a better light falling into the mouth. Opportunity is likewise afforded to professional antiquarians to hunt after a name for this operation. To them I freely make over the right of baptism."

We recommend Mr. Travers's translation to all who feel interested in obtaining a clear idea of Dieffenbach's operation. It is accompanied by several diagrams, illustrating the modes of performing the operation, the instruments employed for the purpose, and the appearance of the organ at a certain lapse of time after its completion.

WESTMINSTER MEDICAL SOCIETY.

Saturday, March 20, 1841.

Mr. Streeter, President.

STAMMERING, ITS CAUSES AND TREATMENT.

Last week a communication was inserted in The Lancet from Mr. Yearsley on the subject of stammering, and a new operation for its removal, consisting, in some cases, of the removal of a portion of the tonsils and uvula, and in others of the uvula alone. It having been announced that the subject would be brought before the society this evening, there was a very large meeting of the members and visitors. It will be scarcely necessary to go over again the grounds upon which Mr. Yearsley was first induced, and now continues, to operate for stammering; for although his paper was more lengthy than that already printed, and he read a great number of cases in which he had operated, the substance of his remarks we have published; and in the cases which he read, we could find no diagnostic marks to indicate the particular kind of stammering to which he considered his operation was likely to be of service: altogether about one hundred and twenty persons have submitted to the treatment, "the great majority of which were cured, all more or less relieved:" of these one hundred and twenty patients, three only were women! With regard to the extent of the operation, Mr. Yearsley, in most cases, removed the uvula entirely, chiefly with the view of throwing both arches of the palate into one. When the tonsils were so much enlarged as to project beyond the columns of the fauces, the uvula was then partially removed, and also so much of the tonsils as projected: in only one case had anything like severe hæmorrhage took place, and in this the bleeding continued for four hours. The operation, however, might not be unattended by danger, when there was a diathesis to hæmorrhage present in the system.

Mr. Dowing believed that three kinds of operation had been recommended and performed for the cure of stammering; the one proposed by Mr. Yearsley, that discovered by Dieffenbach, and that practised by Mr. Bennett Lucas. He (Mr. Dowing) had seen cases operated upon by Mr. Yearsley and Mr. Lucas; though the latter gentleman's cases bore no comparison in number to Mr. Yearsley's, as he had hitherto operated on only fourteen persons. In all these cases, as well as in those he had seen operated upon by Mr. Yearsley, the operation at the time certainly appeared successful; but he contended that we had not yet had sufficient time to determine whether the good effect would be permanent. Looking at the *invariable* success of all the operations, which were so remarkably different in kind, he could not help thinking that much of the effect was dependent on the shock to the nervous system by the operation and the loss of blood consequent upon it. Mr. Lucas's operation consisted in the division of the frænum linguæ, and the removal of a portion of the anterior fibres of the genio-hyo-glossi muscles: Mr. Lucas did not perform his operation indiscriminately on all who applied, as Mr. Yearsley appeared to do, but always thoroughly examined into each case, and investigated, as far as possible, into its history and causes; he only operated in such cases as were likely to be benefitted by the proceeding. In the fourteen cases operated upon, the tongue was tied down either by the frænum or the muscles beneath; and in all these cases the operation had been successful. In other cases the success had appeared to be decided at the time, but the stammering eventually returned. He (Mr. Dowing) could not understand upon what principle removal of the uvula and tonsils could relieve stammering; and he thought Mr. Yearsley had brought forward his operation rather as a specific, acting in a manner he did not understand, than as a scientific proceeding, based upon scientific grounds; he objected also to the paper and to the cases as not being sufficiently explicit. Did stammering in many cases exist with deafness, because the removal of the deafness might remove the impediment to speech? He thought, also, that we had no proof that stammering ever did depend on enlargement of the tonsils or elongation of the uvula. The fact that so many cases of enlarged tonsils and elongation of the uvula existed without stammering, was against the opinion alluded to.

Mr. Alcock had paid much attention to the subject of stammering of late, and had seen many operations performed by Mr. Yearsley. In some of these no good result followed, but in others the operation was attended by marvellous improvement; in others there was some doubt as to whether any improvement had taken place; in others, again, relief, but not a cure, followed. It was evident in some of the cases that the cure was not temporary, and depending, as Mr. Dowing had supposed, on the shock and loss of blood, for the improvement continued at the end of two and three weeks, when all effects from such causes were gone. He was convinced, however, that stammering depended upon a variety of causes, and that Mr. Yearsley's operation would not be applicable in all cases; in some, however, it was decidedly successful. There were one or two points in the paper of some interest, and respecting which he requested information of Mr. Yearsley. Stammering, he had observed in the cases related, had very frequently commenced about the eighth year of age; had this been observed to be

general? Did the number of women mentioned as affected with stammering, viz., three in one hundred and twenty, bear the usual relation in regard to number in these cases; and was the ulceration following operations upon the uvula frequent or very troublesome?

Mr. MALYN had seen three cases operated upon by Mr. Yearsley, and had been struck with the success of the proceeding, which he contended had both method and reason in it. In one case, in which there was decided elongation of the uvula, the operation was attended by instant relief: in the other cases, he thought the operation, on looking into the patient's mouth before its performance, would be of no avail, as in one case the uvula was not elongated, and in the other was shorter than natural; it was found, however, that the velum occasionally descended, the uvula was accordingly snipped off, and the operation was successful. Stammerers found the greatest difficulty in making the dental and labial sounds; it would be found, on pronouncing any letters of this kind, that the velum descended, and hung pendulous over the top of the windpipe: he divided language into two portions,—the material, and the power of manufacturing the material into words. Now, if the supply of the material was interfered with, as he believed it was in those cases in which the uvula hung over the epiglottis, the manufacture of words could not go on; remove the obstructing body, as was done by Mr. Yearsley's operation, and the supply of material was sufficient, and the stammering was removed. That the good effect was dependent upon this cause, he thought, was further proved by all the persons operated upon remarking that a great weight was removed from the scrobiculus cordis, a weight which would arise from the obstruction to the expiration of air; the tonsils could not produce such obstruction, nor could he see how their removal acted beneficially. He was also at a loss to understand in what manner the removal of a portion of the genio-glossi muscles could be of benefit. Dr. Arnott, in his work on Physics, had recommended the stammerer to enunciate the vowel e when his speech was impeded: now, in enunciating this letter, the velum palati was drawn up, and the supply of material was rendered perfect; the obstruction again occurred at some difficult word, but was again removed by the same mode of relief. He thought this still further proved the position which he wished to maintain. With regard to the ulterior success of the operation, he thought the fact of the uvula consisting of muscles, and that these muscles were divided at right angles, would be a sufficient answer in the affirmative. The operation, however, would not succeed in all cases, as stammering depended on a variety of causes; and even where it was of benefit, education must go hand in hand with its performance, as so much in these cases depended on moral causes.

Mr. BROOKE had seen several of Mr. Yearsley's operations, and they were successful. He entered at some length into his views with regard to the physiology of language, and remarked, that where the vibrations of sound were interfered with, stammering was the result.

Dr. MARSHALL HALL applauded the unostentatious and liberal manner in which Mr. Yearsley had brought his discovery before the profession. He had freely stated the manner in which it had been made—had fairly invited the profession to witness its effects, and now had as liberally brought the subject before the society for discussion. Dr. Hall observed, that the previous speakers had not, he thought, entered into the true line of argument. Too much had been said about the tumidity of the tonsils, and of the tongue; too little about the functional properties of the organs of articulation. Now, tumidity of the tonsils induced a certain well-known and easily-recognisable thickness of the voice; tumidity of the tongue induced a special defect of articulation, but neither of these induced stammering. On the other hand, stammering was excited in a little patient of his whenever the general health was deranged. Dr. Bostock had detailed, in the "Medico-Chirurgical Transactions," a case of stammering cured by the administration of purgative medicines; and, lastly, stammering was excited as a part of chorea. These, and other facts, proved that stammering was not so much an organic as a functional defect; and the question to be agitated that evening was, what relation the excision of the uvula could have with the cure of such a malady. Dr. Hall had been witness to two cases: the first was that of Philip Wyatt; before the operation, which consisted in the removal of the uvula, the patient was asked his name; in vain he attempted to enunciate the Ph; the effort seemed to threaten convulsions; the operation was performed; the same question was put, and the ready reply was, Philip Wyatt! In the second case, the good effect, though less complete, was not less obvious. Now, what could be the rationale of this phenomenon? That it could be at all connected with the more or less open state of the air-passages, Dr. Hall regards as most improbable. In many cases there was no enlargement of the tonsils or tongue, no elongation of the uvula, neither was there any want of volume or force of the expired air, when the word was well pronounced, or in the pronunciation of such letters as did not absolutely interrupt the flow of the expired air, as v., s., &c.; nor was there, as Dr. Arnott thought, any obstruction to the flow of air in the larynx itself, as he (Dr. Hall) had shown in a paper published in the

"Journal of the Royal Institution," in 1831. The obstruction was offered by the organs, not of the voice, but of the articulation; not of the physical condition of the parts, but of their undue action. In pronouncing the letter b, the mouth was closed by the force on adduction of the lips, the posterior nares being closed by the veil of the palate. Long ago Dr. Hall had described stammering as an undue spinal action; the stammering of chorea proved this. He would now venture to ask, might the situation of the uvula and its peculiar contact with the parts of the posterior nares lead to a reflex spinal action? The act of vomiting on tickling the fauces was not less marvellous or inscrutable; the uvula in this manner might be the excitor and regulator of speech. Stammering might be induced in cases in which its posterior surface was unduly excitable. In this manner we might explain the effects of Mr. Yearsley's operation; but Dr. Hall begged the society to view his last observation as a conjecture. Elongation of the uvula could have no effect in inducing stammering as supposed, by falling on the tongue; for in the enunciation of many letters, as b, t, v, s, &c., it was raised, with the velum, high up, so as to assist in closing the posterior nares. Time and further investigation were, as Mr. Yearsley was aware, required to mature the investigation, to determine the special cases of stammering to which the operation was adapted. But enough had been done to excite the deepest interest in every liberal mind.

Mr. Solly thought Mr. Yearsley's operation was not open to the objections of Mr. Dowing, as he had given a full explanation of the mode in which he considered it was beneficial. He (Mr. Solly), however, considered the mode in which it acted was dependent on other causes; vocalisation depended much on the muscles of the soft palate, which were brought into action to make the pillars of the fauces tense for the proper production of voice. When these muscles were in an unnatural state (or there was an unhealthy condition of the nervous system present) they acted spasmodically; and when the tonsils were enlarged, were brought too closely together, and hence obstructed sound.

Mr. Chance believed that stammering was not dependent upon elongation of the uvula, as the affection was so very common in cases in which stammering did not exist.

Discussion adjourned.

MEDICAL SOCIETY OF LONDON.

Monday, March 22, 1841.

Dr. Clutterbuck, President.

IS AN OPERATION NECESSARY FOR THE CURE OF STAMMERING?

Mr. Bishop brought before the society a paper on stammering, in which he discussed the principles upon which the effect depended, and the mode by which it might be relieved, without the necessity of any operation. He refrained from entering fully into the functions of the organs employed for the production of voice, or to enumerate and discuss the modifications which were necessary for articulate language; but, in the first place, considered whether those structures which had been selected for operation were the primary cause of the malady; and, secondly, he attempted to show the physiological principles upon which it really depended, and the mode to be employed for its relief. Stammering had been supposed to arise either from the tension of the frænum linguæ, from spasmodic action, or contraction of one or more of the muscles of the tongue, or from the interocussions of the velum and tonsils.

The Frænum linguæ.—When the band tied the point of the tongue too closely to the floor of the mouth, it was generally discovered in the earliest period of infancy: the child could not grasp the nipple of its parent with facility, and its early division was usually resorted to. If the tip of the tongue could touch the roof of the mouth, and the letters d, t, n, could be sounded, the point of the tongue then had sufficient mobility, and the tension of the frænum was not the cause of the defect in question.

The Muscles of the Tongue.—When the stammerer could articulate any sentence whatever, the malady could not be caused by the malformation of the muscles; as, in that case, the impediment would be permanent, and the stammerer could not articulate and hesitate, at intervals, upon the same words, as was well known to be the case with persons with this defect.

Velum and Tonsils.—The velum never produced stammering in a person in whom the defect did not pre-exist, either by its enlargement or relaxation; neither did we find that chronic enlargement of the tonsils ever affected articulation, though they might affect the pitch and quality of the voice. They might be so much enlarged as to impede deglutition and respiration, and also the passages to the ear; or they might be ulcerated with the surrounding tissues; but daily experience proved that they were never observed to be instrumental in the production of stammering.

These views, though chiefly deductive, were, nevertheless, tolerably decisive of the fact, that stammering did not usually arise from any morbid condition, or structural malformation, of the organs selected for excision. He should attempt to show that it depended rather upon the functional play of the organs of speech, and upon the mismanagement of those organs, than upon any organic defects. It had been very properly observed, by Sir C. Bell, that the consent of a great number of organs was necessary to

the production of the most simple sounds, or the articulation of a single word; but it was to Dr. Arnott that we were indebted for the principles upon which the defect depended. He remarked, in his "Elements of Physics," page 595, that "command over the organs of speech was acquired in the same way as over all the other muscular organs of the body, as those for walking, skating, fencing, performing on musical instruments, &c.; that is to say, at first, a distinct act of volition is required for every individual movement; but the law of association, or habit, rendering the actions easier with each successive repetition, they are at last formed into connected tribes or trains, which appear as obedient to a single wish as the separate elements originally were. There is a great original diversity among individuals as to their powers of association, and therefore, also, as to their aptitude of acquiring the various muscular faculties. A stutterer may, by frequent practice in making the particular combinations of sound which are difficult to him, obtain a control over the articulating organs, so as to remedy the defect." It was only necessary for the person in whom it existed, Mr. Bishop continued, to let the sound precede, and be prolonged during the attempt to articulate, to overcome the difficulty. In confirmation of this fact, it was well known that the worst stammerers, if they happened to be singers, articulated with fluency during the act of singing. We needed no stronger proof of the defect having its origin in functional causes alone, and not in any malformation of the organs. The ludicrous configurations and spasmodic contortions of the mouth and face, when the stammerers attempted to articulate with unvocalised breath, were the natural effects of those efforts. In his own practice he had had no difficulty in making the most incomprehensible stammerer utter whole uninterrupted sentences, by merely instructing him, previously, how to vocalise the breath; then by directing him to produce a prolonged sound, as if he were about to sing; and, in the mean time, to articulate, with a kind of drone, the words he wished to express. After two or three interviews, the most ignorant of his public patients had been able to articulate with facility. Cases, however, might possibly exist, in which the motions of the tongue might be restricted by the genio-hyo-glossi muscles; and the division of the genio-glossi portions had been attended with apparent relief, according to M. Amussat, Mr. Bennett Lucas, and others; but these cases were very rare; and the power of articulation should be always previously tested, upon the principles of Dr. Arnott's hypothesis. When we reflected upon the consequences of Dieffenbach's operations, which consisted either in the division of the muscles of the tongue at its root, and cutting, at the same time, through the lingualis, genio-hyo-glossi and stylo-glossi, with their blood-vessels and nerves, and the hæmorrhage and danger resulting, or of cutting a transverse wedge-shaped slice out of the dorsum of the tongue, it appeared to be making a retrograde movement in surgery to inflict such desperate wounds upon mere hypothetical reasoning, particularly when they were destitute of any recognised physiological principles to justify them. The author had endeavoured to show that the defect of stammering depended principally upon functional causes, capable of relief by the most simple means; and that wounds of the tongue, or excisions in the throat of the velum and tonsils were unwarrantable and unnecessary. It was merely with the view of preventing the repetition of such operations, and to point out the simplicity of the mode of cure, and the physiological principles upon which the defect depended, as well as to prevent its being made a subject of quackery, that he had given this sketch of his views upon stammering. In answer to a question, Mr. Bishop replied, that he had found the remedy mentioned permanent and constant in its effects. When the stammering returned, it was from want of attention on the part of the stammerer.

Mr. Linnecar believed that the late Mr. Thelwall treated stammering on the principles which Mr. Bishop had laid down. He should object decidedly against the removal of the uvula as a means of curing this defect, as he thought the power of deglutition would be, by that step, much interfered with, and from his belief that stammering was altogether independent of physical obstruction.

Mr. Dendy considered that we must admit that some cases of stammering were altogether dependent upon functional, while others were the result of organic, causes. Deafness was not always dependent upon functional disorder, neither was amaurosis; but both these states might be the result of organic disease. The same law, he thought, applied to stammering. Had not Mr. Bishop rejected some cases as not likely to be benefitted by his plan of treatment? Any barrier, at the upper part of the larynx, to the expulsion of air, might cause stammering; and a tongue bound down by the frænum, would produce deficiency of utterance. He could not doubt that operations for the removal of these defects had been attended with success; neither could he doubt that the treatment of the defect, as merely a functional one, in some cases, had been equally successful; and this, he repeated, was dependent upon the different causes which produced the stammering.

Mr. Bishop considered that ninety-nine stammerers out of every hundred could be relieved by the mode which he had mentioned; he had not, however, intended to

make it appear an exclusive mode of treatment. He was ready to admit, with Mr. Dendy, that organic disease, such as a contracted state of the tongue, might be productive of stammering, and removable by operation; but he could not believe that enlargement of the tonsils ever acted as such a cause. An operation upon the throat, with the view of relieving stammering, might produce good effects by an impression made upon the mind, but he could not conceive it to act in any other way.

Mr. PILCHER agreed in the main with Mr. Bishop, regarding the causes of stammering. He could not possibly understand how enlargement of the uvula or tonsils could produce the defect, nor how their removal could effect a cure, unless it were by a mental impression. The uvula and tonsils were so constantly enlarged, without any stammering being induced, even when the tone and strength of the voice were very much impaired, that he doubted if stammering ever did result from this cause. He had never seen a case of stammering as the result of the tongue being tied down. In old works upon surgery we were cautioned against the removal of the uvula and tonsils, inasmuch as such a proceeding would be injurious to the voice. With regard to obstructions in the larynx, and their connection with stammering, he had seen a case in which a wart was situated in this canal, and although it produced aphonia, there was no stammering. In a case of œdema of the vocal cords, the voice was reduced to a whisper, but no stammering was present. The patient had previously a good bass voice, and sung well. In a little patient, who had been deaf and dumb, and in whom he had succeeded in producing good hearing, and who was now under an elocution-master to teach her to speak, the tonsils and uvula were very much enlarged; but this was a peculiarity observable in the family, consisting of ten children, yet none of them stammered. The father was also affected in the same way, but he was an accomplished debater in the House of Commons. In cases of hollow palate there was difficulty in speech, but not stammering. He believed, with Mr. Bishop, that stammering was dependent on functional disorder, and was much aggravated by mental excitement. He knew a gentleman who always stuttered before strangers, but could speak uninterruptedly to his friends. He had met an eminent physician who had been present at some of Mr. Yearsley's operations, and this gentleman had not been quite sure that all the patients *did* stammer before the operation, and that sufficient time had not yet been given to decide upon the permanent consequence of such operation. If persons who stammered were properly educated, on the plan recommended by Mr. Bishop, the defect might be remedied without operative procedure.

Dr. FIELD believed that stammering was produced in consequence of the patient not inspiring air, and attempting to speak without an inspiration.

Dr. CHOWNE remarked, that if no permanent good were effected by the operations which had been performed for the relief of stammering, it was quite clear that there was much of error in them. He believed that stammering did not depend on organic defects, or how could the stammerer at some time speak as fluently as was necessary to any speaker? He regarded the defect as dependent a great deal upon mental causes; and, with this belief, he was not at all surprised that an effect upon the mind (such as an operation on the throat of a patient who believed it would relieve him), would produce a temporary cure that might last for three weeks; or even that it might effect a permanent cure. He had seen several stutterers who had been operated upon, and in whom there did not appear to be any improvement, although they stammered out that they were better. He did not believe that the elongated uvula acted as a mechanical obstruction to the progress of air.

Erratum.—In the report of the last meeting of this society, Mr. Bishop recommended that the tumour near the mamma, but not connected with it, should be removed, without the operation at all implicating the gland.

BRITISH MEDICAL ASSOCIATION.

Exeter Hall, March 16, 1841.

ROBERT DAWSON, Esq., V. P., in the chair.

DR. A. MADDOCK, 80, Judd-street, Brunswick-square, was elected a member.

Letters on the subject of medical reform, from Mr. Hawes, M.P., and Mr. Carmichael, of Dublin, and from Mr. Talfourd, M.P., on medical politics, were read.

A correspondence with Mr. C. H. Higgins, of Taunton, on the formation of a medical association in that town and neighbourhood, was read.

Resolved—"That the half-yearly general meeting of the association should take place on Tuesday, the 30th of March."

Exeter Hall, March 23.

Dr. WEBSTER, President, in the chair.

Letters were read from Mr. John Valentine, of Somerton, on the qualifications of poor-law medical officers; and from Mr. Charles H. Higgins, of Taunton, on the formation of the "Taunton and West Somerset Medical Association," which already numbers nearly forty members. The rules and regulations drawn up for their guidance, much resemble those of the British Medical Association; and they have appointed Dr.

A. B. Granville their representative at the conference of delegates, now sitting in London. The report of the Royal College of Physicians, on the "grievances contained in the petitions for medical reform," was laid on the table.

Arrangements having been made for the half-yearly general meeting, the council adjourned.

UNIVERSITY COLLEGE HOSPITAL.

STRANGULATED FEMORAL HERNIA—ARTIFICIAL ANUS—CURE.

CHARLES LUTWYTCH, æt. 51, admitted January 30, at three o'clock, P.M., under the care of Mr. Quain (dresser, Mr. W. Barker); of slight conformation, good previous health, regular in his habits, and accustomed to labour in a gas-manufactory. About twenty-one years ago, he perceived a tumour, "smaller than a nut," in his left groin, which gave him no uneasiness, but became gradually larger, and never disappeared. A second tumour appeared about twelve months since at the opposite side, and he then obtained a double truss. The first formed hernia was found to be irreducible; that last formed was readily replaced, but it has occasionally descended since that time, and has been as easily replaced; his bowels have not been opened for the last two days.

During part of yesterday, and the whole of last night, he was actively engaged in carrying sacks of coal (having on his truss). About nine o'clock this morning he felt very unwell; had an inclination to vomit and to go to stool, and felt pain in the abdomen and in the tumour of the *left* side, which, on examination, he found to be harder and larger than usual; being obliged to cease from work, he went home and took an ounce of Epsom salts, which was soon followed by a scanty solid motion.

On admission.—There is pain over the abdomen (aggravated by pressure), which is tense and tympanic; he has constant nausea, and occasionally vomits a thin, greenish fluid; he is restless and agitated; pulse 50, and small. There is no tumour at the right side, but at the left side is situated a tumour presenting the usual characters of a femoral hernia. It is of the size of a goose-egg, tense, painful on pressure, not preternaturally hot, neither is there any discoloration. Being placed in a favourable position for the application of the taxis (with a hope of reducing the part which had last descended), it was tried, but without effect; and a second attempt was made, after he had been placed for some minutes in a bath of Fahr. 108°, but without a favourable result.

Six o'clock, P.M. He refuses absolutely to submit to an operation. The abdomen is now more tense and tympanitic; tongue dry, but clean. The vomiting still continues; the griping pains are less severe; an elastic tube was then passed up the large intestine to the extent of two feet, but no air escaped, and no benefit resulted; and it being evident, from the state of the tube when withdrawn, that the lower part of the intestine was loaded with fæcal matter, a copious enema was exhibited.

Nine o'clock. The enema brought away two stools of comminuted solid fæcal matter, and, at the same time, some urine was voided. The vomiting continues, and the abdomen is more tense; the tumour is in the same condition.

Operation.—He now consented to the operation, which was performed by Mr. Quain. The integuments being held in a fold, an incision was made across the narrow diameter of the tumour, and directed obliquely inwards; a second incision, directed inwards, joined this nearly at its centre, and at right angles Y; the former being about three inches in length, the latter one inch. Then, by carefully cutting down on it, the sac was exposed, and laid open on a director; this exposed a large mass of brownish omentum, marked by highly-congested vessels; on turning this outwards, some folds of intestine were seen (at the inner side), of a deep and uniform slate-colour, and without any appearance of ramification of blood-vessels. The sac contained no fluid, and the omentum was adherent firmly to its neck; the intestine was entirely unadherent. The sac being held aside by the assistant, Mr. Quain passed the forefinger of his left hand down the stricture, which was remarkably tight; and with the other hand using Cooper's hernia knife, guided by the finger of the left hand, divided the stricture, by cutting slightly inwards; this being found insufficient, a second small incision was made in the same manner, and in the like direction. When returning the intestine, some thin fluid fæcal matter was seen to escape from its anterior portion, at the distance of an inch and a half from the stricture; and, on examination, an opening was observed in this situation of about four lines in diameter. The edges of the opening in the intestine were very soft, dark-coloured, and irregular; and within a few lines of it was situated, on the same plane, a spot of about the same size, or rather smaller, of a very dark colour, differing much in appearance from the rest of the intestine, and evidently in a state of gangrene. The operator then passed a loop of thread through the sound portion of intestine, at the sides of the opening, and then returned the remaining portion, leaving the opening at the neck of the sac. The omentum was then removed with a knife, and the loop of thread secured round a fold of lint, in order to keep the perforated part of the intestine for the pre-

sent at the neck of the sac; a layer of lint was placed over the wound, and the patient removed to bed. Shortly afterwards, two small omental arteries began to bleed, and required ligatures. During the application of these there was a gush of fluid from the wound; it was clear, but slightly tinged with blood. The fluid obviously proceeds from the cavity of the peritonæum.

31. One o'clock, A.M. The same fluid comes from the wound in abundance. There is still tenderness of the abdomen; but the tension is less, and he has no vomiting; he complains of thirst; pulse 60, rather hard. Ordered to have—

℞ *Calomel*, gr. ij;
Muriate of morphia, gr. ¼.

To be taken every alternate hour. Toast-water for drink; and a warm poultice over the abdomen.

Eight o'clock, A.M. He has had some hours' sleep. The bed-clothes are saturated with the discharge of serous fluid from the wound; there is less tenderness, and much less abdominal tension; some air passes from the wound, and relieves occasional griping pain.

One o'clock, P.M. The tenderness on pressure is increased. To have tartar emetic, ¼ grain added to each pill, and to have a sinapism applied to the abdomen.

Ten o'clock, P.M. The discharge of fluid through the wound is now much lessened; the abdomen is tumid, and tender on pressure, though relieved in the morning by the sinapism; pulse 76; some dirty, brownish matter, of a disagreeable odour, escapes from the wound. Eighteen leeches to be applied to the abdomen, and succeeded by fomentation.

Feb. 1. Has rested well; less tenderness over the abdomen; discharge of serous fluid has ceased; but now there is an abundant discharge of thin fluid fæces from the wound, which looks well; pulse 86, and complains of thirst. To have but 1-16th of a grain of morphia in each dose.

Vespere. Doing well; pulse 90. Some grease applied around the wound, to prevent excoriation; and the fold lint removed, by cutting across the thread.

2. There is no particular change; mouth rather tender. To omit the pills.

3. There is less tenderness of the abdomen; pulse 64. He has had an abundant fæcal discharge by the rectum; the discharge from the wound is less. The loop of thread is withdrawn from the intestine.

Vespere. In the early part of the day he had several discharges, by the rectum, of a slimy matter, with some traces of blood, and attended with griping pain. To omit the powder; to have morphia, ¼ gr.; and an enema of starch and opium.

4. Not so well. Tenderness of the abdomen still continues; pulse 60, and compressible; bowels moved three times, and tenesmus still continues. To have six minims of sedative solution of opium in half an ounce of mint-water every four hours. Sinapisms to the epigastrium, and fomentations.

Vespere. Nearly as before; tenesmus is, however, less, but the bowels are much relaxed. Substitute for the last medicine, a scruple of chalk-powder with opium, and ten grains of catechu, to be taken every four hours.

5. He is better in every respect. The discharge from the wound is healthy; bowels act less frequently, and the evacuations are unattended by pain; feels weak. To have beef-tea in addition to rice-milk.

Vespere. There is an increase of tenderness over the abdomen; has little inclination for food, but wishes for cold drinks; pulse 72, fuller; tongue coated. Omit the powders, and apply twelve leeches to the abdomen.

6. Is better; but the skin of the upper and inner part of the thigh is much irritated from the effect of the discharge by the wound. To apply oxide of zinc, diffused in water, to the excoriated parts.

7. Much improved, but feeble. To have half an ounce of wine in some arrow-root occasionally.

8. Doing well. Less fæces come by the wound, which looks very healthy, though not granulating as yet. Expresses himself much comforted by the zinc lotion.

10. Doing well. Wound granulating, and less discharge of fæces from it; some slight tenderness of epigastrium. Six leeches to this region.

14. Progressing favourably. Bowels not opened in the natural way; fæces come from the wound freely. Wishes for some meat; to have a chop, but no vegetables.

15. No evacuation from the rectum. To have a laxative enema.

16. Decidedly improved. Enema was followed by a healthy fæcal motion. The wound is granulating rapidly. Wine ℥j daily.

17. Bowels opened rather scantily, and with some traces of blood. To have castor oil, ℥ss, with tincture of henbane, ℥ss.

20. There has been no intestinal derangement; and, in last report, bowels regularly moved. Discharge from wound is much diminished.

March 5. Wound completely cicatrised; health very good; and he is now free from all trouble regarding the hernia of the left side: that of the right side has not descended since the patient had been in the hospital.

10. Is in excellent health and spirits, and feels no inconvenience of any kind. There is no tension of the abdomen, or at the cicatrix; neither does he feel any tightness, or drawing sensation, when he bends the trunk backwards.

15. Cured.

THE MEDICAL PROFESSION BILL.

To Benjamin Hawes, Esq., M.P.

Among the favourite expressions of a departed statesman was that of "proceeding backwards." How far it is applicable to the *progress* of the ill-fated Bills, I leave you, Sir, to determine. Their brief course has been marked by so many incidents, that those who have watched it can scarcely forbear a passing comment on their features.

On the momentous evening when the Augean stable of the medical community was to have been cleaned, there were, it seems, not enough helpers to effect the process, for Alcides could not, in this instance, perform the labour by himself; in plain terms, the house was counted out. On this point I presume to differ from the talented Editor of The Lancet, when he terms this a "melancholy" fact; to *my* mind it is a star of promise, an indication of the indifference of the Legislature to a Bill so replete with objections; it has, therefore, been allowed in silence to expire.

This, Sir, is the third great warning with which you have been visited: it is but a repetition of the disapprobation which the profession and even the druggists have before expressed of your measure.

It would be ungracious to withhold from you my confidence in your well-wishing to the public and the profession; but, sooth to say, your good intentions have been but ill requited by both.

The profession itself is almost universally dissatisfied, although courtesy may have induced the professional delegates to back out from their opposition to your *amended* paper. The representatives of the public have evinced *their* sentiments of this *castrato* of a Bill, in a mode not to be mistaken.

If the profession has not yet learned the evils resulting from a want of union in its members, I am sure our senators have; they are so bewildered by ex-parte petitions and letters, that they may as well give up legislating, until they have before them the *combined* or amalgamated sentiments of the whole profession.

You will smile at my folly in hoping for such a thing, but the profession will at length be just to itself, and will, by adopting the principle of *mutual concession*, preserve their honour and their interests. They may be assured that without this they will be sullied and invaded.

The corporations, indeed, are now acting on this principle, as the civet cat in the fable, pressed by the hunters, bites off its precious bag of pomade, and thus at once stops the pursuit. And why should not the profession follow this example, and thus at once legislate for itself? Why can it not see that the mere separation of the science and the trade (chiefly by a judicious change in the constitution of the Apothecaries' Company), would enhance at once the prosperity of the profession itself, and destroy the jealousies of the chemist, which, I have ever asserted, are not entertained without some reason?

Were the hall not a trading mart, its licentiates would not be traders. Were it *only* a trading mart, who would *be* its licentiates? Of course the chemists, who would, by the surveillance of the apothecaries, be confined within their own proper sphere. The public would thus have a negative registration, even in the streets, by which they might discriminate between the profession and the trade.

I feel assured that the chemist, if called in conference by the profession, would be induced, by salutary concessions, to submit to the legal restriction on his prescribing, and to the reduction of his per-centage, remembering that the mass of dispensing in large towns will be carried on at his counter.

By this plan, too, there would be far more congeniality between the referee and the general practitioner; for one great cause of their shyness is from the complaint of the latter, that there is an understanding between the physician and the chemist, prescriptions being sent to his chemist which *he* ought to dispense.

On such a principle you would at once lay the corner-stone of your grand "one-faculty scheme."

To the profession, then, I should say, "unite in a *combined* petition;" to Mr. Hawes I should say, "wait until this petition be presented." I am, Sir, your obedient servant,

Δ.

March 22, 1841.

REFORM OF THE PROFESSION.

To the Editor of The Lancet.

Sir:—I should feel obliged by the insertion of the following letter to Mr. Hawes in your valuable Journal, if you could conveniently allow me so much space. I am, Sir, your obedient servant,

Edward Bagnall.

To Mr. Hawes.

Sir:—As your Bill for the regulation of Medical Practice is postponed until Wednesday next, I take the liberty of suggesting to you the defects of the present state of the profession, with the view of directing your attention to the provision of a remedy. *Physicians*, under the present regulations, *cannot charge or recover fees* for attendance; they are incapacitated by the Apothecaries' Act, and are amenable to its penalties, for dispensing their own medicines. This state of things requires a total change, and the

law should provide for the remuneration of the physician. That the high grade of the profession should be subject to, and under the control of, the lowest, is an anomaly that exists in no other country; more especially constituted, as the apothecaries are, of a *trading company of druggists*, self-elected, conducting the examinations of candidates in secret, and deriving a large income from licences to practise, which is divided among the wardens and examiners. This income is not beneficial to the licentiates; nor is it directed to the maintenance of the rights and privileges which are supposed to be secured to the members of the company, when they obtain a licence to practise; but when an apothecary feels himself aggrieved, or his sphere of practice is narrowed by the encroachments of unqualified practitioners, he is (himself) bound to risk the result of a prosecution, borrowing the names of the master and wardens of the Apothecaries' Company; by which, if he obtain a verdict, the company is entitled to one-half of the penalty, the informer to the other; if defeated, he is amenable to the defendant in double costs, and the company escapes scatheless. These abuses have now existed so long, and the anxiety of the profession for relief is so general, that nothing short of a radical reform will satisfy the members. The College of Physicians and the Apothecaries' Company are now willing to reform themselves (if their professions are to be believed); but this reform would only tend to create greater confusion and a worse state of things than exists at present. I would suggest that there should be one examining body only, selected in equal numbers from the College of Physicians, the College of Surgeons, and the Apothecaries' Company, by election annually, by whom all candidates should in future be examined (without distinction as to medical schools); that those examinations should be conducted in public; that it should be rigid and satisfactory; and that such fees should be paid by candidates for a diploma as should compensate the examiners for their trouble, and leave a surplus towards the expenses of the government in the shape of stamp duty: that all qualified members of the profession in actual practice at the passing of the Bill should be recognised as duly qualified; but should (*by law*) be obliged to enrol their names under the society, and be amenable to its penal statutes, and receive a diploma (without examination) on payment of the stamp duty and customary fees.

To these regulations, I conceive, every member of every grade of the profession would readily assent; and I believe that there is no scheme more likely to ensure the successful working of medical reform; and, at the same time that we establish one uniform system of examinations, we render the profession a fruitful source of income to the government, without taxing its members unreasonably; and, inasmuch as the profession of the law is heavily amerced by government for stamps, fees, &c., there is no reason why the medical profession should not contribute its quota towards the expenses of the government. I do not propose to abolish any of the existing societies; I would suffer them to exist, and leave it to the option of the profession to obtain diplomas from either or from all as an honorary distinction, but not as a matter of compulsion. It would also be desirable to facilitate the recovery of the fees of the profession for attendance, medicines, &c.; allowing (in case of dispute as to charges) a reference to the examining body, who should have the power to tax disputed bills and award costs. I am, Sir, your obedient servant,

EDWARD BAGNALL

ABUSES IN ST. GEORGE'S.

To the Editor of THE LANCET.

SIR:—A letter appeared in THE LANCET of last Saturday, signed a "Medical Student," to which I would wish to say a few words in answer, which I am sure will find insertion in the pages of your Journal, professing, as it does, to do all in its power to correct abuses, though not at the expense of truth itself.

Your correspondent is evidently one of those industrious, wrong-headed young gentlemen, who do nothing but gape about the wards of a hospital, for the mere purpose of finding out faults, where, perhaps, none exist.

It is stated, in the letter alluded to, that Dr. Seymour "manages to give as little information in an hour's time as any man he ever heard." Now, I would refer the "Medical Student," and your readers generally, to THE LANCET of the 27th of February last, containing clinical lectures by *Dr. Seymour*, and let them judge for themselves. As for Dr. Seymour's instruction in the wards, I can only say that he gives his pupils the result of a long experience, in a most amusing and clever manner; and it matters not whether the maladies to which he alludes have been inflicted upon a pauper or a peer, so that they afford the necessary instruction.

With regard to Dr. Hope and his clerks, it is true he possesses a little medical magnificence, but there is no doubt of his being a clever man; his works will alone prove that fact. And if he prefer to have a clerk, who has some knowledge of the stethoscope, the pupils have every opportunity to qualify themselves for that duty in the wards of the hospital by works on that subject, and by the remarks of Dr. Hope himself. This, surely, is better than allowing incorrect facts, mistaken bruits and râles, to be inserted in the clinical report book; subjecting the

unhappy patient to an extra quantity of pommelling and exposure (and they have enough as it is) by the physician himself. As to the fact of the present clerk keeping Dr. Hope's book, having previously had Dr. Macleod's, the reason is plain: no one else wished to take it. Every one who knows anything of his profession at all, is aware that women injure themselves by tight lacing; it will be useless, therefore, to comment on the remarks on that subject in the letter of your correspondent.

ANOTHER MEDICAL STUDENT.

HANWELL ASYLUM.

To the Editor of THE LANCET.

SIR:—I have read the two letters signed "Philanthropos," in your Numbers of the 20th and 27th of February, and which I presume are from the pen of one of the visiting justices of the Hanwell Lunatic Asylum. I have neither time nor inclination to enter into discussions with an anonymous opponent; neither do I think it necessary, after the full and public defence of my conduct, voluntarily undertaken, in my absence, by Mr. Sergeant Halcombe, and other magistrates, at the late meetings of the Middlesex justices upon this subject, and to whom I beg leave to return my most grateful thanks. I understand that, in result, it was the almost universal opinion of the court, that farther inquiry must take place into the medical treatment, and the so-called system of *non restraint*, pursued at Hanwell; of the resultof which inquiry I entertain not the slightest doubt, and shall, therefore, trouble you no further in the present state of this subject. I am, Sir, your most obedient servant,

GEO. P. BUTTON.

Dorset County Lunatic Asylum.

PRURITUS ANI FROM ASCARIDES.

To the Editor of THE LANCET.

SIR:—Lime-water has long been a popular remedy in vermination, and could we secure its direct contact with the worms in every case it would be an infallible one. Let anybody who doubts this pour a small quantity of lime-water upon a grass-plot, and observe the effect upon the lumbrici, the rapidity with which they shoot to the surface and die. An accidental observation of this phenomenon led me to employ enemata of lime-water in ascarides, and I recommend J. H. to try them in the case he alludes to. The remedy is exceedingly simple, and he may prescribe it on any return of the nuisance. As quantities of the entozoa are expelled by it on each application, I imagine he would in time get rid of them altogether. I have generally preceded it with a purgative of calomel and rhubarb. C.

MEDICAL-BOARD EXAMINATIONS.—A correspondent (Edinburgh) warmly complains, of "certain persons who denominate themselves lecturers, and who are qualified to instruct the young, but who endeavour to entrap the student, by informing him that their class-tickets will qualify them for admission to examination by the Naval and other public boards; and thus induce the student, at a distance from his friends and advisers, to pay the fees for a ticket which afterwards proves to be of no such use to him. Both I," he adds, "and fellow-students have experienced this deceit from individuals, in whom all confidence has been placed by the inexperienced and unsuspecting. The consequences are serious: a young man attends classes, which he is led to believe qualify for the Naval Board, but who, upon his making application at the Admiralty, is informed that such tickets are not recognised by that department. His hopes are thus blighted in an instant—hopes which accompanied him day after day, caused him to exert himself, spurred him on in his studies, and made him oft-times 'trim the midnight lamp.' He must attend classes elsewhere for another session, or give up all thought of entering the public service." He trusts that his complaint may be "a hint to those who are engaged in the study of medicine to look sharply around them, and not allow themselves to be imposed upon by men of such principle as these lecturers."

TO CORRESPONDENTS.

Mr. J. G. writes to us in expostulation with the author of some recent remarks on the medical officers of St. George's Hospital. Mr. G. takes the opportunity of saying some very agreeable things on behalf of the courteous demeanour of one of them in consultation; but we are quite sure that the proper effect of Dr. H.'s manners and good breeding amongst his brethren in the profession, will be produced where they have the opportunity of being manifested, without any advertisement of them in our pages. Dr. H. will, nevertheless, be equally obliged to Mr. G.

W. M. S. It would not be "recognised" at either institution.

The paper "on the prevention of small-pox pits" shall appear in our next.

Communications have been received from *N. H.*; *Mr. Robert Stevens*; *Mr. Rees*; *A Pupil of the London Hospital*; *Mr. Lloyd*.

The insertion of the letter of "*Another Student of St. George's*" is anticipated in the letter upon the same subject, published in our present Number.

Dr. Weatherill's communication shall appear in our next.

The letter of a "*Student of St. George's*" is too long, and too diffuse for our pages.